Docket:	:	A.09-07-001
Exhibit Number	:	
Commissioner	:	John Bohn
Admin. Law Judge	:	Jeffrey O' Donnell
DRA Project Mgr.	:	Patrick Hoglund

DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

REPORT ON THE RESULTS OF OPERATIONS IN MID-PENINSULA DISTRICT OF CALIFORNIA WATER SERVICE COMPANY

Test Year 2011 and
Escalation Years 2012 and 2013
Application 09-07-001

For authority to increase water rates located in its
Mid-Peninsula District serving
San Carlos and San Mateo, Santa Clara County.

San Francisco, California
February 10, 2010

TABLE OF CONTENTS

MEMORANDUM

The Division of Ratepayer Advocates ("DRA") of the California Public Utilities Commission ("Commission") prepared this Report in California Water Service Company's ("CWS") rate case proceeding A.09-07-001. In this docket, the Applicant requests an order for authorization to increase rates charged for water service by $5,397,200 or 17.7 % in Test year 2011; by $1,989,600 or 5.6% in Escalation year 2012; and by $1,989,600 or 5.3% in Escalation year 2013 in its Dixon District service area. The applicant requests adoption of a rate of return of 8.58% from D. 09-05-019. DRA presents its analysis and recommendations associated with the Applicant's request in this Report.

Patrick Hoglund serves as DRA's project coordinator in this review, and is responsible for the overall coordination in the preparation of this report. Appendix A contains witnesses' prepared qualifications and testimony.

DRA's reports on payroll, conservation expenses and special requests are included under separate Reports.

DRA's Legal Counsels for this case are Selina Shek, Allison Brown, and Hien Vo.

EXECUTIVE SUMMARY

CWS requests increasing rates by 17.7% in Test Year 2011 and 5.6% in Escalation Year 2012, whereas DRA recommends a decrease of .2% in Test Year 2011 and inflationary increases for the Escalation Years

Key Recommendations

DRA recommends that CWS' requested rate of return of 8.58% be adopted in this proceeding.

DRA's recommendations are based on lower total sales (Chapter 2), lower estimates of Operation and Maintenance expenses (Chapter 3), lower estimates of Administrative and General expenses (Chapter 4), lower Plant additions (Chapter 7) and lower Ratebase (Chapter 9).

DRA addresses its recommended treatment of CWS' 30 Special Requests ("SR") in a separate report. That report discusses Special Request #19 regarding the delay of the rate base offset pilot as approved in D.08-07-008, and Special Request #10 regarding consolidation of the South San Francisco District with the Mid-Peninsula District for rate making purposes.

List of DRA Witnesses and Respective Chapters

Chapter Number	Description	Witness
-	Executive Summary	
1	Overview and Policy Introduction and Summary of Earnings	Patrick Hoglund
2	Water Consumption and Operating Revenues	Lisa Bilir Zachary Burt
3	Operations and Maintenance (except Payroll) Expenses	Pat Ma
4	Administrative & General (except Payroll & Conservation) Expenses	Cleason Willis
5	Taxes Other Than Income	Jerry Oh
6	Income Taxes	Jerry Oh
7	Utility Plant in Service	Isaiah Larsen
8	Depreciation Reserve and Depreciation Expense	Isaiah Larsen
9	Ratebase N/G multiplier	Isaiah Larsen Richard Rauschmeier
10	Customer Service	Toni Canova
11	Rate Design	Lisa Bilir
12	Water Quality	Pat Ma
13	Step Rate Increase	Patrick Hoglund

CHAPTER 1: OVERVIEW AND POLICY

A. INTRODUCTION

This Report sets forth DRA's analysis and recommendations for A. 09-07-001, CWS' general rate increase request for Test Year 2011 and Escalation Years 2012 and 2013.

B. SUMMARY OF RECOMMENDATIONS

Tables 1-1 through 1-3 of the Summary of Earnings compare the results of operations for Test Year 2011 including revenues, expenses, taxes and ratebase.

C. DISCUSSION

CWS requests the total revenues as follows:

Year	Amount of Increase	Percent
2011	$5,397,200	17.7%
2012	$1,989,600	5.6%
2013	$1,989,600	5.3%

CWS estimates that its proposed rates in the Application will produce revenues providing the following returns:

Year	Return on Rate Base	Return on Equity
2011	8.58%	10.2%
2012	8.58%	10.2%
2013	8.58%	10.2%

D. CONCLUSION

DRA recommends a revenue decrease for the Test Year as follows (Escalation Years 2012 and 2013 are covered in Chapter 12):

Year	Amount of Decrease	Percent
2011	$52,700	.2%

D.08-07-008 authorized the last general rate increase for CWS in A. 07-07-001, resulting in a rate of return on rate base of 8.66% in 2008-2009. Present rates in this report are based on Advice Letter No.1924, which became effective July 1, 2009, as authorized by D.08-07-008.

A comparison of DRA and CWS' estimates for rate of return on rate base for the Test Year 2011 at present and the utility's proposed rates is shown below:

RATE OF RETURN

	DRA	CWS	Diff
Present Rates	8.66%	2.71%	-5.95%
Proposed Rates	16.59%	8.58%	-8.01%

TABLE 1-1

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	30,466.5	30,521.8	55.3	0.2%
Operating expenses:				
Operation & Maintenance	16,820.8	18,781.8	1,961.0	11.7%
Administrative & General	1,465.1	1,651.8	186.7	12.7%
G. O. Prorated Expense	3,194.9	4,305.7	1,110.8	34.8%
Dep'n & Amortization	2,331.6	2,594.4	262.8	11.3%
Taxes other than income	561.5	691.1	129.6	23.1%
State Corp. Franchise Tax	500.3	148.9	(351.5)	-70.2%
Federal Income Tax	2,106.1	881.2	(1,224.9)	-58.2%
Total operating exp.	26,980.3	29,054.8	2,074.5	7.7%
Net operating revenue	3,486.2	1,467.0	(2,019.2)	-57.9%
Rate base	40,268.3	54,215.2	13,946.9	34.6%
1 Return on rate base	8.66%	2.71%	-5.95%	-68.7%

TABLE 1-2

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(AT UTILITY PROPOSED RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	35,863.2	35,919.7	56.5	0.2%
Operating expenses:				
Operation & Maintenance	16,826.8	18,787.7	1,961.0	11.7%
Administrative & General	1,465.1	1,651.8	186.7	12.7%
G. O. Prorated Expense	3,194.9	4,305.7	1,110.8	34.8%
Dep'n & Amortization	2,331.6	2,594.4	262.8	11.3%
Taxes other than income	561.5	691.1	129.6	23.1%
State Corp. Franchise Tax	976.9	625.5	(351.3)	-36.0%
Federal Income Tax	3,826.0	2,611.6	(1,214.4)	-31.7%
Total operating exp.	29,182.8	31,267.9	2,085.1	7.1%
Net operating revenue	6,680.4	4,651.8	(2,028.6)	-30.4%
Rate base	40,268.3	54,215.2	13,946.9	34.6%
1 Return on rate base	16.59%	8.58%	-8.01%	-48.3%

TABLE 1-3

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(DRA ESTIMATES)

Item	DRA Est. @ Present Rates	@ Rates Proposed by DRA	Proposed Exceeds Present Amount	%
	(Thousands of $)			
Operating revenues	30,466.5	30,413.8	(52.7)	-0.2%
Operating expenses:				
Operation & Maintenance	16,820.8	16,820.7	(0.1)	0.0%
Administrative & General	1,465.1	1,465.1	0.0	0.0%
G. O. Prorated Expense	3,194.9	3,194.9	0.0	0.0%
Dep'n & Amortization	2,331.6	2,331.6	0.0	0.0%
Taxes other than income	561.5	561.5	0.0	0.0%
State Corp. Franchise Tax	500.3	495.7	(4.7)	-0.9%
Federal Income Tax	2,106.1	2,089.3	(16.8)	-0.8%
Total operating exp.	26,980.3	26,958.8	(21.5)	-0.1%
Net operating revenue	3,486.2	3,455.0	(31.2)	-0.9%
Rate base	40,268.3	40,268.3	0.0	0.0%
1 Return on rate base	8.66%	8.58%	-0.08%	-0.9%

CHAPTER 2: WATER CONSUMPTION AND OPERATING REVENUES

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations regarding the forecasted number of customers, water sales and operating revenues for CWS' Mid-Peninsula district. Mid-Peninsula had an average of 36,179 service connections in 2008; the Mid-Peninsula district includes San Mateo, San Carlos and vicinity, in San Mateo County. DRA reviewed CWS' data responses, testimony, application, and workpapers before formulating its own estimates.

B. SUMMARY OF RECOMMENDATIONS

DRA adhered to the methods outlined in the Rate Case Plan ("RCP") in DRA's analysis of sales forecast and revenues. Whereas, CWS' sales forecast method differed from the RCP. Appendix A to Chapter 2 for DRA's Bakersfield report provides a detailed explanation of DRA's sales forecast and revenue methods. The Commission should uphold the methods outlined in the RCP by adopting DRA's recommendations presented in this report.

1) Average Active Service Connections

CWS proposes to forecast the number of customers using the four-year (2004-2007) average change in customers by customer class for the Residential, Business and Multifamily customer classes. CWS states, in WP 4-B1, that it proposes the four-year average because of customer reclassifications occurring in 2008. CWS proposes to forecast the number of customers using the five-year (2004-2008) average change in customers by customer class for the Industrial, Public Authority and Other customer classes. DRA proposes that the four-year (2004-2007) average for all customer classes.

2) Metered Sales and Supply

The Commission should require CWS to use the method proposed by DRA for residential and business customers, in accordance with the RCP, going forward, and should also adopt DRA's estimates for metered sales and supply in this case. Table 2-1 at the end of this chapter illustrates DRA and CWS' proposed sales per average customer for each customer class. DRA uses the same general methodology as CWS to estimate multiple regression equations in accordance with the RCP and the "New Committee Method" ("NCM"). As is outlined in the NCM, rain, temperature and time are included in the regression model, where possible. The primary difference between DRA and CWS' forecasts are that CWS used the regression equations to calculate weather-adjusted recorded sales from 2008 and used this as its estimated sales for 2011. DRA used the regression equations to calculate forecasted sales for 2011 and 2012, based on the 30-year monthly average rain and temperature, in accordance with the RCP.[1].

3) Operating Revenues

The Commission should adopt DRA's estimates for operating revenues. DRA uses the same method as CWS to calculate operating revenues, although DRA presents the operating revenues differently for illustrative purposes (see Appendix A to Chapter 2 for DRA's Bakersfield report in section B. 1. and B. 2. for the complete explanation).

4) Unaccounted for Water

CWS estimates 5.35% unaccounted for water in Mid-Peninsula based on the five-year average of recorded unaccounted for water. DRA agrees.

[1] D.07-05-062, Appendix A – Rate Case Plan and Minimum Data Requirements for Class A Water Utilities General Rate Applications, p. A-23, footnote 4, (B) "Use 30-year average for forecast values for temperature and rain"

C. DISCUSSION

1) Average Active Service Connections

Customer growth is the forecasted growth of a customer base in a given area. CWS and DRA use customer growth to project revenues for 2011-2012. The RCP, adopted in D.07-05-062 requires the number of customers to be forecast using a five-year average of the change in the number of customers by customer class, unless an unusual event occurs, in which case an adjustment to the five-year average may be made.[2] Table 2-2 and 2-3 at the end of this chapter summarize DRA and CWS' proposed average number of customers for each customer class in 2011 and 2012, respectively.

a. Residential, Business, Multifamily, Public Authority, Industrial, and Other

CWS proposes using the five-year average change in the number of customers by customer class for the Public Authority, Industrial and Other customer classes. For Residential, Business and Multifamily customer classes, CWS proposes to forecast the number of customers using the four-year (2004-2007) average of the change in the number of customers by customer class due to the customer reclassifications during 2008, making it an anomalous year. DRA proposes to forecast the number of customers using the four-year (2004-2007) average of the change in the number of customers by customer class for all customer classes since the reclassification likely affected the Public Authority, Industrial and Other customer classes as well.

[2] D.07-05-062, Appendix A: RCP, p. A-23, footnote 4.

2) Metered Sales and Supply

Table 2-4 and 2-5 at the end of this chapter summarize DRA and CWS' proposed metered and flat rate sales in Mid-Peninsula for each customer class in 2011 and 2012, respectively.[3] DRA removed CWS' 1.5% conservation adjustment to consumption in 2012 and the reasons are described in Appendix A to the Bakersfield report, section A. 4.

b. Residential

DRA accepts CWS' use of the unconstrained regression model, with the exception of the inclusion of an autoregressive term. However, DRA used the regression equation to forecast sales, while CWS used the regression model to weather-normalize 2008 recorded sales. Workpaper Revenue-001 shows the regression model that DRA and CWS chose. The following table summarizes DRA and CWS' recommendations:

Table 2-a: forecasted sales (ccf[4]/service)

	CWS	DRA	% difference
2011	145.9	143.8	-1.4%
2012	143.7	143.1	-0.4%

c. Business

DRA accepts CWS' use of the modified unconstrained model (including monthly temperature and rain but not time). However, DRA used the regression equation to forecast sales, while CWS used the regression model to weather-normalize 2008 recorded sales. Workpaper Revenue-001 shows DRA's regression model. Table

[3] If DRA's sales forecast combined with DRA's other recommendations leads to higher bill increases than CWS presented in its notices to customers, DRA recommends that the total bill increases should be capped at CWS' proposed levels.

[4] 100 cubic feet

2-b below summarizes DRA and CWS' recommendations for sales per service for business customers:

Table 2-b: forecasted sales (ccf/service)

	CWS	DRA	% difference
2011	442.3	447.6	1.2%
2012	435.7	447.6	2.7%

d. Multifamily

Multifamily customers accounted for 13.13%[5] of metered sales for the Mid-Peninsula district in 2008. As CWS notes, the number of customers in this customer class changed from 570 at the end of year ("EOY") 2007 to 625 at the EOY 2008. Because of this change in the number of customers, CWS proposes to use 2008 sales per customer (1,645.3 ccf/service[6]) to project future use in 2011. While it is possible that the new customers in this customer class use significantly less water per customer, the use of a single year of data when a lot of customer reclassifications were occurring could underestimate the sales in this class.[7] A substantial underestimate of the sales forecast could lead to rates that are too high and ultimately this customer class could overpay for water service because WRAM overcollections are distributed to all customer classes, not just to the customer classes that overpaid. There is not enough evidence to exclude the 2008 sales data, however, to address the possibility of underestimating sales for this customer class, while still taking 2008 reductions into account, DRA proposes to forecast sales using the five-year average of sales in this customer class (1,678.2 ccf/service). This recommendation leads to an overall difference between DRA and CWS of 2.0% in 2011 for the multifamily customer class.

[5] Calculated from CWS' Table 4-C

[6] See "Mid-Peninsula_exp_July_2009" Workpaper 4-D1, cells L:27 thru L:29

[7] For example, if the customers were added to this customer class in August, and their sales only contributed to total sales for 4 months, while the average is calculated based on this number of

(continued on next page)

Table 2-c: forecasted sales (ccf/service)

	CWS	DRA	% difference
2011	1,645.3	1,678.2	2.0%
2012	1,620.6	1,678.2	3.6%

e. Industrial

For the Industrial customer class, CWS recommends the use of 2008 sales to forecast sales on a customer class basis. Although sales did drop in 2008, one year is an insufficient amount of time to establish a new sales pattern, especially given the erratic pattern of sales in this customer class in the past. Instead, DRA recommends the use of the five-year average of sales.

Table 2-d: forecasted sales (Kccf / Industrial customer class)[8]

	CWS	DRA	% difference
2011	37.0	48.5	31.0%
2012	36.5	48.5	33.0%

f. Public Authority

Public Authority customers in the Mid-Peninsula district accounted for 4.51% of metered sales in 2008. Sales seems to have stabilized at a new, lower level in 2005, and stayed at that level until the present time. Therefore, CWS recommends the use of the four-year (2005-2008) average forecast sales for the Public Authority customer class. There was a large change in the number of Public Authority customers during 2008, likely due to the reclassifications that occurred that year. For the Public Authority customer class, sales are forecasted for the entire customer class, and the number of customers is not incorporated in the model. Therefore large changes in the number of customers in 2008 might

(continued from previous page)
customers for the entire year, this could underestimate sales per customer.

[8] The numbers in Table 2-d differ from the numbers in Table 2-1 because Table 2-d illustrates sales for the entire customer class, while Table 2-1 illustrates sales per average customer within each customer class. DRA and CWS forecasted sales for Industrial, Public Authority, and Other customer classes for the entire customer class, rather than for an average customer.

affect sales in a way not accounted for by the estimated model. For this reason, DRA agrees with CWS' proposal to use the average sales for the last four years. Table 2-e below compares DRA and CWS' forecasted sales for the Public Authority customer class.

Table 2-e: forecasted sales (Kccf)[9]

	CWS	DRA	% difference
2011	317.0	317.0	0.0%
2012	312.3	317.0	1.5%

g. Other

DRA agrees with CWS' proposed method to use the five-year average sales for the Other customer class.

3) Operating Revenue

Tables 2-6 and 2-7 at the end of this chapter summarize DRA and CWS' forecasted operating revenue at present rates in 2011, at CWS proposed rates in 2011 and at present rates in 2012, respectively.

h. Residential

CWS calculates operating revenue for metered residential customers by (1) taking the sum of estimated quantity revenues calculated for each meter size, for each month and for each tier of the increasing block rate design based on three-year average sales patterns and (2) adding this to the estimated service charge revenues, calculated by taking the average number of customers each year and multiplying it by the service charge. CWS' method is outlined in detail in

[9] The numbers in Table 2-e differ from the numbers in Table 2-1 because Table 2-e illustrates sales for the entire customer class, while Table 2-1 illustrates sales per average customer within each customer class. DRA and CWS forecasted sales for Industrial, Public Authority, and Other customer classes for the entire customer class, rather than for an average customer.

Appendix A of Chapter 2 in DRA's Bakersfield Report. DRA does not recommend any changes to this method.

i. Business, Multifamily, Public Authority, Industrial and Other

CWS calculates operating revenues for business, multifamily, public authority, industrial, and other customers by (1) taking the sum of estimated quantity revenues for each meter size, for each month based on three-year average sales patterns and (2) adding the quantity revenues to the estimated service charge revenues, calculated by multiplying the forecasted average number of customers by the meter charges. CWS's method is outlined in detail in Appendix A to Chapter 2 of DRA's Bakersfield Report. DRA does not recommend any changes to this method.

4) Unaccounted for Water

CWS proposes unaccounted for water percentage of 5.35%, based on the five-year average recorded unaccounted for water. DRA agrees.

D. CONCLUSION

1) Average Active Service Connections

The Commission should adopt DRA's recommended number of service connections.

2) Metered Sales and Supply

DRA recommends adherence to the RCP and NCM for forecasting metered sales and supply and recommends that the Commission adopt DRA's forecasted sales estimates and require CWS to use the method proposed by DRA for residential and business customers going forward.

3) Operating Revenues

DRA accepts CWS' method for calculating operating revenues, with the following modifications for illustrative purposes: for all customer classes, DRA used the present rates given by CWS at the time it filed the GRC application to illustrate Operating Revenues at Present Rates for 2011 and 2012. Also, DRA used the proposed rates from CWS' GRC application filed in July 2009 to calculate Operating Revenues at Proposed Rates. Appendix A to Chapter 2 for DRA's Bakersfield report in section B. 1. and B. 2. provides a detailed explanation.

4) Unaccounted for Water

CWS estimates 5.35% unaccounted for water in Mid-Peninsula based on the five-year average of recorded unaccounted for water. DRA agrees.

TABLE 2-1

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT
WATER SALES PER AVERAGE CUSTOMER

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(CCF/CONN./YR)			
Residential	143.8	145.9	2.1	1.4%
Business	447.6	442.3	(5.3)	-1.2%
Multiple Family	1,678.2	1,645.3	(32.9)	-2.0%
Industrial	505.2	394.0	(111.2)	0.0%
Public Authority	946.4	880.6	(65.7)	-6.9%
Other	3,696.2	4,180.4	484.2	13.1%
Irrigation	0.0	0.0	0.0	0.0%
Res. Flat Rate	0.0	0.0	0.0	0.0%

TABLE 2-2

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

AVERAGE NUMBER OF CUSTOMERS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
Metered Connections				
Residential	31,067	31,067	0	0.0%
Business	3,350	3,350	0	0.0%
Multiple Family	618	618	0	0.0%
Industrial	96	94	(2)	-2.1%
Public Authority	335	360	25	7.5%
Other	26	23	(3)	-11.5%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	35,492	35,512	20	0.1%
Flat Rate Connections				
Residential Flat	0	0	0	0.0%
Private Fire Protection	729	729	0	0.0%
Public Fire Protection	39	39	0	0.0%
Total flat rate connections	768	768	0	0.0%
Total Active Connections				
Include Fire Protection	36,260	36,280	20	0.1%
Exclude Fire Protection	35,492	35,512	20	0.1%

TABLE 2-3

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

AVERAGE NUMBER OF CUSTOMERS

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
Metered Connections				
Residential	31,082	31,082	0	0.0%
Business	3,344	3,344	0	0.0%
Multiple Family	615	615	0	0.0%
Industrial	96	93	(3)	-3.1%
Public Authority	336	371	35	10.4%
Other	27	23	(4)	-14.8%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	35,500	35,528	28	0.1%
Flat Rate Connections				
Residential Flat	0	0	0	0.0%
Private Fire Protection	742	742	0	0.0%
Public Fire Protection	42	42	0	0.0%
Total flat rate connections	784	784	0	0.0%
Total Active Connections				
Include Fire Protection	36,284	36,312	28	0.1%
Exclude Fire Protection	35,500	35,528	28	0.1%

TABLE 2-4

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

TOTAL SALES AND SUPPLY

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(KCCF/YEAR)			
Metered Sales				
Residential	4,467.2	4,532.7	65.5	1.5%
Business	1,499.6	1,481.7	(17.8)	-1.2%
Multiple Family	1,037.1	1,016.8	(20.3)	-2.0%
Industrial	48.5	37.0	(11.5)	-23.6%
Public Authority	317.0	317.0	0.0	0.0%
Other	96.1	96.1	0.0	0.1%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	7,465.5	7,481.4	15.9	0.2%
Flat Rate Sales				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 5.35%	422.0	422.9	0.9	0.2%
Total delivered	7,887.5	7,904.3	16.8	0.2%
Supply				
Purchases - SFPUC	7,887.5	7,904.3	16.8	0.2%
Total production	7,887.5	7,904.3	16.8	0.2%

TABLE 2-5

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

TOTAL SALES AND SUPPLY

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(KCCF/YEAR)			
Metered Sales				
Residential	4,448.3	4,466.8	18.5	0.4%
Business	1,496.9	1,456.9	-40.0	-2.7%
Multiple Family	1,032.1	996.7	-35.4	-3.4%
Industrial	48.5	36.5	-12.0	-24.8%
Public Authority	317.0	312.3	-4.8	-1.5%
Other	96.1	94.7	-1.4	-1.4%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	7,438.9	7,363.8	(75.0)	-1.0%
Flat Rate Sales				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 5.35%	420.5	416.2	(4.3)	-1.0%
Total delivered	7,859.4	7,780.0	(79.3)	-1.0%
Supply				
Purchases - SFPUC	7,859.4	7,780.0	(79.4)	-1.0%
1 Total production	7,859.4	7,780.0	(79.4)	-1.0%

TABLE 2-6

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

OPERATING REVENUES

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
WRAM Revenues				
Residential	14,665.8	14,880.8	215.0	1.5%
Business	5,115.2	5,054.3	(60.9)	-1.2%
Multiple Family	3,532.7	3,463.4	(69.3)	-2.0%
Industrial	165.2	126.1	(39.1)	-23.7%
Public Authority	1,081.2	1,081.2	0.0	0.0%
Other	304.4	304.6	0.2	0.1%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	24,864.5	24,910.4	45.9	0.2%
Non-WRAM Revenues				
Service Charges	5,181.8	5,191.2	9.4	0.2%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	316.6	316.6	0.0	0.0%
Public Fire Protection	15.1	15.1	0.0	0.0%
Other	88.5	88.5	0.0	0.0%
Total Flat Rate	5,602.0	5,611.4	9.4	0.2%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	30,466.5	30,521.8	55.3	0.2%

TABLE 2-7

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

OPERATING REVENUES

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
WRAM Revenues				
Residential	17,498.3	17,754.9	256.6	1.5%
Business	6,422.9	6,346.5	(76.4)	-1.2%
Multiple Family	4,437.1	4,350.1	(87.0)	-2.0%
Industrial	207.5	158.4	(49.1)	-23.7%
Public Authority	1,357.7	1,357.7	0.0	0.0%
Other	382.4	382.5	0.1	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	30,305.9	30,350.2	44.3	0.1%
Non-WRAM Revenues				
Service Charges	5,121.0	5,133.2	12.2	0.2%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	339.2	339.2	0.0	0.0%
Public Fire Protection	16.2	16.2	0.0	0.0%
Other	80.9	80.9	0.0	0.0%
Total Flat Rate	5557.3	5569.5	12.2	0.2%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	35,863.2	35,919.7	56.5	0.2%

CHAPTER 3: OPERATIONS AND MAINTENANCE EXPENSES

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations on Operation and Maintenance ("O&M") expenses in the Mid-Peninsula district of California Water Service Company ("CWS") for the Test Year 2011. Table 3-A shows the comparison of total O&M expense estimates at present rates for the Test Year.

Table 3-A. Comparison of Mid-Peninsula District's Total O&M Expense Estimates (including Payroll and Conservation).

Test Year 2011	DRA	CWS	CWS Exceeds DRA
Total O&M Expenses	$16,820,800	$18,781,800	$1,961,000 or 11.7%

B. SUMMARY OF RECOMMENDATIONS

DRA recommends that the Commission adopt its estimates for individual O&M expense accounts as discussed in the following sections. For the Mid-Peninsula district, DRA recommends adjustments to CWS' Test Year estimates for the following O&M expense accounts: (1) Purchased Water; (2) Purchased Power; (3) Purchased Chemicals; (4) Postage; (5) Water Treatment, (6) Transmission and Distribution; (7) Operations Transportation; (8) Maintenance Transportation; and (9) Uncollectibles.

C. DISCUSSION

DRA conducted an independent analysis of CWS testimonies, workpapers and methods of estimating the O&M expenses for the Mid-Peninsula district in this General Rate Case ("GRC").

Generally, CWS uses a five-year average of recorded expenses adjusted for inflation to estimate its O&M expenses. CWS deviates from the five-year average

approach when it believes excluding a certain year's recorded expense from the average would provide a more accurate estimate of forecast years' expense levels.

DRA reviews the overall pattern of inflation-adjusted recorded expenses to assess the reasonableness of CWS' estimates and to propose alternative estimates, where applicable. DRA also examines the recorded data to determine the appropriateness of including in the forecast (averaging) calculation certain costs, such as one-time costs that are not expected to occur in the forecast period.

In calculating expenses that are a function of water production, sales and/or number of customers, DRA uses its estimates presented in Chapter 2 - Water Consumption and Operating Revenues of this Report. Both DRA and CWS apply DRA Energy Cost of Service Branch's escalation factors issued on May 31, 2009 to develop forecasted expenses.

Table 3-1 at the end of this chapter summarizes the O&M expense estimates DRA recommends and compares them with CWS requests for Test Year 2011. Each O&M expense account listed in Table 3-1 is discussed below.

1) OPERATION EXPENSES

(a) PURCHASED WATER

All of the district's water production is purchased from the San Francisco Public Utilities Commission ("SFPUC"). Purchased Water expenses in the Mid-Peninsula district are comprised of fixed and variable charges from the SFPUC.

DRA agrees with CWS' method of estimating the district's Purchased Water costs and the use of currently effective SFPUC rates and charges. DRA's estimates however reflect its purchased water forecasts presented in Chapter 2 of this Report.

DRA recommends that the Commission adopt DRA's Test Year 2011 Purchased Water expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Purchased Water	$13,212,500	$13,240,200	$27,700 or 0.2%

(b) GROUNDWATER EXTRACTION CHARGES

CWS' Mid-Peninsula district does not incur any groundwater extraction charges.

(c) PURCHASED POWER

To estimate its purchased power expense, CWS first multiplies its estimated kilowatt-hours per hundred thousand cubic feet (KWh/KCcf) of water produced by its estimated annual water production quantity (in KCcf).[10] The resulting energy requirement (in KWh) is then multiplied by the average cost per KWh purchased from PG&E.[11]

DRA agrees with CWS' method of estimating Purchased Power expense for this district. DRA's estimates however reflect its water production forecasts presented in Chapter 2 of this Report.

DRA recommends that the Commission adopt DRA's Test Year 2011 Purchased Power expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Purchased Power	$519,800	$521,500	$1,700 or 0.3%

[10] CWS uses KWh/KCcf and unit cost quantities from the district's last GRC. As stated in CWS' July 1, 2009 General Report, projected changes in the unit cost of purchased power are not included; this expense is offsettable by an advice letter filing.

[11] Ibid.

(d) PURCHASED CHEMICALS

Purchased Chemicals expense is a function of the cost of chemicals and the estimated water supply requirement. CWS develops its Test Year estimate by multiplying the inflation-adjusted, recorded purchased chemical cost per unit of production by the total annual water production forecast (from applicable sources).

CWS' Purchased Chemicals estimates for this district are based on an average of recorded unit costs from the most recent *four-year* period. The recorded costs for this account in 2008 dollars are as follows:

Year	Purchased Chemicals Unit Cost, $/KCCF (2008 dollars)
2004	0.001148
2005	0.001076
2006	0.001268
2007	**0.000267**
2008	**0.000303**

As highlighted in bold above, the 2007 and 2008 unit costs are substantially lower than those from the previous three-year period, 2004-2006. In its response to DRA's data request PPM-002, CWS explains that in 2004 the SFPUC switched from using free chlorine to chloramines as a disinfectant. That switch necessitated additional testing as required by the California Department of Public Health. CWS attributes the higher expenses in the 2004-2006 period to these additional testing chemicals.

DRA believes that because the higher costs from 2004-2006 are directly attributable to an event that is significant and non-recurring, they should not be included in the forecast calculations. DRA recommends that the forecasted unit cost be based on 2007 and 2008 unit costs only. DRA's total Purchased Chemicals expense estimates reflect 2007-2008 average unit costs, escalated for inflation, and its water supply forecasts presented in Chapter 2 of this Report.

DRA recommends that the Commission adopt DRA's Test Year 2011 Purchased Chemicals expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Purchased Chemicals	$2,300	$5,800	$3,500 or 152.2%

(e) OPERATIONS PAYROLL

For Operations Payroll expense estimates, please refer to DRA's Payroll Report. DRA's Operations Payroll expense estimate for Test Year 2011 is included in Table 3-1 at the end of this Chapter.

(f) POSTAGE

CWS' annual postage cost for the District is a function of: (1) postage rates; (2) the number of customers; and (3) the number of mailings to each customer per year. In this GRC, CWS assumes the number of mailings per customer remains constant over the forecast period. However, CWS applies a 4.8% increase in postage cost per customer in 2009 to account for a May 11, 2009 rate increase implemented by the United States Postal Service ("USPS"). For 2010-2012, CWS escalates the postage cost per customer by those years' composite escalation factors.

DRA notes that the 4.8% increase in postage rate is applicable to first-class mailings. Since CWS' customer mailings would qualify for USPS bulk mailing rates, applying the 4.8% in first-class rate increase to the forecast does not accurately reflect CWS' expected postage cost increase. DRA recommends using a lower 3.2% increase as an approximation of CWS' 2009 increase in postage cost per customer. The 3.2% increase is the average increase of USPS bulk mailing rates effective on May 11, 2009.

Additionally, DRA does not believe that escalation factors should be automatically applied to 2010-2012 postage expense forecasts. Annual rate increases are not at all certain. For example, according to the Associated Press on

October 19, 2009, "Postmaster General John E. Potter announced in an internal postal memorandum that there will be no rise in prices next year [2010] for products in which the agency dominates the market, such as first-class mail." Bulk-rate mailings fall into this same USPS product category and, therefore, are not expected to have a rate increase in 2010. For that reason, DRA recommends that escalation factors *not* be applied to the District's postage expense forecasts.

In addition to the above two adjustments to CWS' calculations, DRA also reflects its forecasted total number of customers presented in Chapter 2 of this Report.

DRA recommends that the Commission adopt DRA's Test Year 2011 Postage expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Postage	$146,000	$156,600	$10,600 or 7.3%

(g) OPERATIONS TRANSPORTATION

CWS develops the District's total Transportation expense estimate in aggregate for (1) Operations, (2) Maintenance, and (3) Administration and General (A&G). The total estimate is then allocated among these three areas by the average distribution over the last recorded period, which is 2008.

CWS develops its total transportation expense estimate based on recorded 2008 costs adjusted for inflation. Additionally, if the forecast period includes a request for additional vehicle(s), CWS increases the transportation expense estimate by the ratio of additional vehicle(s) to total number of existing vehicles. CWS does not request any additional vehicles for this District in this GRC.

Based on its review of the District's recorded expense levels, DRA believes the use of multi-year recorded data better reflects the annual variation in transportation expenses. DRA's estimates therefore are based on a five-year (2004-2008) average, instead of CWS' proposed 2008-only data. DRA uses

CWS' allocation methodology to determine Transportation expense estimates for Operations, Maintenance and A&G.

DRA recommends that the Commission adopt DRA's Test Year 2011 Transportation expense estimates in Table 3-B below.

Table 3-B. Transportation Expense Estimates for Mid-Peninsula District.

Transportation Expenses:	DRA	CWS	CWS Exceeds DRA
Operations	$118,600	$114,800	-$3,800 or -3.2%
Maintenance	$44,600	$43,100	-$1,500 or -3.2%
A&G	$20,900	$20,200	-$700 or -3.2%
Total:	$184,000	$178,100	-$5,900 or -3.2%

(h) UNCOLLECTIBLES

CWS estimates its Uncollectibles expense for the Mid-Peninsula District by applying the average uncollectible rate from its most recent five-year period (2004-2008) to its revenue estimates. The uncollectible rate from each recorded year is calculated by dividing total recorded uncollectible expense by total recorded revenue. DRA reviews the Mid-Peninsula District's recorded uncollectible rates from the most recent six years and finds the historical five-year average rate to be a reasonable estimate for the forecast period. DRA's estimates for total Uncollectibles however reflect DRA's revenue projections presented in Chapter 2 of this Report.

DRA recommends that the Commission adopt an uncollectible rate of *0.11094%* for Test Year 2011 for the Mid-Peninsula District. DRA's recommended Uncollectibles expense total is shown in Table 3-A at the end of this Chapter.

(i) SOURCE OF SUPPLY

CWS' Source of Supply expense estimates for the Mid-Peninsula District are based on average recorded annual expenses from the most recent five years

(2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' Test Year 2011 Source of Supply expense estimate as shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Source of Supply	$100	$100	$0 or 0%

(j) PUMPING

Pumping expenses include labor, miscellaneous, and fuel expenses. CWS' Pumping expense estimates for the Mid-Peninsula District are based on average recorded annual expenses from the most recent five-year period (2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' Test Year 2011 Pumping Expense estimate as shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Pumping	$119,500	$119,500	$0 or 0%

(k) WATER TREATMENT

CWS' Water Treatment expense account includes well sampling, inorganic laboratory, bacterial laboratory, outside lab and miscellaneous expenses. CWS' Water Treatment expense estimates for the Mid-Peninsula District are based on average recorded expenses from the most recent five-year period (2004-2008). The recorded costs for this account in 2008 dollars are as follows:

Year	Total Water Treatment Cost (2008 dollars)
2004	$45,349
2005	$13,688
2006	$17,846
2007	**$87,316**
2008	$37,000

As highlighted in bold above, the 2007 total is substantially higher than those from other years. In response to DRA's data request PPM-002, CWS explains that the increase is related to the changes in water treatment by the

SFPUC, as described earlier in this Chapter. CWS states that "(t)he ramp-up in the sampling and testing resulted in an increase in [water treatment] expenses in 2007," and that this "sampling and testing activities continued in 2008, although it's less than 2007."

DRA believes that because this higher water treatment expense level in 2007 is directly attributable to an event that is significant and non-recurring, it should not be included in the forecast calculations. Therefore, DRA's estimates for Water Treatment expense are based on the average of 2004, 2005, 2006, and 2008 recorded expense levels only.

DRA recommends that the Commission adopt DRA's Test Year 2011 Water Treatment expense estimate as shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Water Treatment	$28,900	$40,800	$11,900 or 41.2%

(l) TRANSMISSION AND DISTRIBUTION

CWS' Transmission and Distribution ("T&D") expense account includes supervision and engineering, flushing, T&D lines, turn on's and turn off's, customer installation and miscellaneous expenses. CWS' T&D expense estimates for the Mid-Peninsula District are based on recorded expenses from the most recent five-year period (2004-2008).

DRA notes a significant drop in T&D expenses in 2007 and 2008 compared to the recorded 2004-2006 levels. In response to DRA's inquiry regarding this drop, CWS provides the following explanation:

> The expenses from 2004 through 2006 included costs associated with the cross connection control program. This program's annual expense is approximately $50,000. In 2007 Cal Water redirected the program from the Mid-Peninsula to the South San Francisco District. This change resulted in a decrease in the expenses in this category.[12]

[12] CWS' response to DRA's data request PPM-002.

DRA believes that because the drop in T&D expenses is directly attributable to the redirection of the cross-connection efforts to another District, those expenses therefore should not be reflected in the forecast calculations. DRA calculates its T&D expense estimates to reflect the most current level of activity in this account by using an average of 2007 and 2008 costs, escalated for inflation. DRA recommends that the Commission adopt DRA's Test Year 2011 T&D Expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
T&D	$105,100	$160,300	$55,200 or 52.5%

(m) CUSTOMER ACCOUNTING

CWS' Customer Accounting expense estimates for the Mid-Peninsula District are based on recorded expenses from the most recent five-year period (2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' Test Year 2011 Customer Accounting expense estimate as shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Customer Accounting	$136,800	$136,800	$0 or 0%

(n) CONSERVATION

For expense estimates, please refer to DRA's Conservation Report. DRA's Conservation expense estimate for Test Year 2011 is included in Table 3-1 at the end of this Chapter.

2) MAINTENANCE EXPENSES

(a) MAINTENANCE PAYROLL

For Maintenance Payroll expense estimates, please refer to DRA's Payroll Report. DRA's Maintenance Payroll expense estimate for Test Year 2011 is included in Table 3-1 at the end of this Chapter.

(b) MAINTENANCE TRANSPORTATION

Section C.1.g of this Chapter presents DRA's analysis and recommendations on total transportation expenses for CWS' Mid-Peninsula District. DRA recommends that the Commission adopt DRA's Test Year 2011 Maintenance Transportation expense estimate presented in Table 3-B (see Section C.1.g).

(c) STORES

CWS' Stores expense estimates for the Mid-Peninsula District are based on average recorded expenses from the most recent five-year period (2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' estimated Test Year 2011 Stores expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Stores	$32,700	$32,700	$0 or 0%

(d) CONTRACTED MAINTENANCE

CWS' Contracted Maintenance expense estimates for the Mid-Peninsula District are based on average recorded expenses from the most recent five-year period (2004-2008). DRA agrees with CWS' estimating approach for this account and recommends no change to CWS' Test Year 2011 Contracted Maintenance expense estimate shown below.

O&M Account	DRA	CWS	CWS Exceeds DRA
Contracted Maintenance	$655,000	$655,000	$0 or 0%

D. CONCLUSION

DRA recommends that the Commission adopt its O&M expense estimates for the Mid-Peninsula District as presented herein.

TABLE 3-1

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

OPERATION & MAINTENANCE EXPENSES

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
At present rates				
Operating Revenues	30,466.5	30,521.8		
Uncollectible rate	0.11094%	0.11094%		
Uncollectibles	33.8	33.9	0.1	0.2%
Operation Expenses				
Purchased Water	13,212.5	13,240.2	27.7	0.2%
Replenishment Assessment	0.0	0.0	0.0	0.0%
Groundwater Extraction Charges	0.0	0.0	0.0	0.0%
Purchased Power	519.8	521.5	1.7	0.3%
Purchased Chemicals	2.3	5.8	3.5	152.2%
Payroll	1,196.5	1,489.9	293.4	24.5%
Postage	146.0	156.6	10.6	7.3%
Transportation	118.6	114.8	(3.8)	-3.2%
Uncollectibles	33.8	33.9	0.1	0.2%
Source of Supply	0.1	0.1	0.0	0.0%
Pumping	119.5	119.5	0.0	0.0%
Water Treatment	28.9	40.8	11.9	41.2%
Transmission & Distribution	105.1	160.3	55.2	52.5%
Customer Accounting	136.8	136.8	0.0	0.0%
Conservation	265.8	1,778.3	1512.5	569.0%
Total Operation Expenses	15,885.7	17,798.5	1912.8	12.0%
Maintenance Expenses				
Payroll	202.8	252.5	49.7	24.5%
Transportation	44.6	43.1	(1.5)	-3.4%
Stores	32.7	32.7	0.0	0.0%
Contracted Maintenance	655.0	655.0	0.0	0.0%
Total Maintenance Expense	935.1	983.3	48.2	5.2%
Total O & M Expenses (incl uncoll)	16,820.8	18,781.8	1961.0	11.7%
At proposed rates				
Operating Revenues	35,863.2	35,919.7		
Uncollectible rate	0.11094%	0.11094%		
Uncollectibles	39.8	39.8		
Total O & M Expenses (incl uncoll)	16,826.8	18,787.7	1961.0	11.7%

CHAPTER 4: ADMINISTRATIVE & GENERAL EXPENSES

A. INTRODUCTION

This Chapter presents DRA's recommended expense levels for California Water Service Company's ("CWS") 2011 Test Year Administrative and General ("A&G") expenses for the Mid–Peninsula District.

The categories of A&G expenses cover general expenses including Payroll, Transportation Expenses, Rent, Administration Charges Transfer, Workers' Compensation, Nonspecific Expenses, Amortization of Limited Term Investments and Dues and Donations Adjustment. Table 4-1 presents a comparison of total expense estimates for Test Year 2011.

DRA analyzed CWS' exhibits, supporting workpapers, CWS' responses to DRA's data requests, information provided in meetings, phone conversations, emails, and CWS' methods of estimating A&G expenses.

B. SUMMARY OF RECOMMENDATIONS

DRA's estimated total for A&G expenses is $1,465,100 for Test Year 2011. CWS' estimate for the same period is $1,651,800, or 12.7% more than DRA. DRA's estimated total for A&G expenses is $1,480,400 for 2012. CWS' estimate for the same time period is $1,696,700, or 14.6% more than DRA. The difference between the forecasted expense levels of DRA and CWS is the result of: 1) DRA's 2011 Test Year estimates of the various A&G activity expenses; 2) account by account adjustments; 3) different methodologies; and 4) the use of the May 2009 Energy Cost of Service Branch escalation factors memo to derive the estimates as discussed below.

C. DISCUSSION

1) Methodology

DRA conducted an independent analysis of CWS' workpapers and methods of estimating the A&G expenses. DRA analyzed CWS' application and exhibits, supporting workpapers, CWS' data request responses, information provided in meetings, field trips to CWS site locations, telephone conversations and e-mails. In general, DRA uses a five-year (2004-2008) average to derive its A&G expense estimates where it has differences with CWS. DRA also removes unusual expenses recorded in certain years to arrive at a different total than CWS, in particular for Nonspecific Expenses. DRA applies its escalation factors to all A&G accounts.

2) Payroll

For A&G payroll expense, please refer to DRA's Payroll Report.

3) Employee Benefits – MID PENINSULA District

There were no methodical differences between DRA and CWS in calculating employee benefits. DRA's estimates for the accounts below are based on (1) total payroll dollars, and (2) total number of employees. CWS' estimates are also a function of these two factors. Per employee unit benefit costs were developed by Milliman[13] and are based on a variety of actuarial assumptions. The underlying assumptions, except for the escalation factors, were accepted by DRA. Any differences are, therefore, attributable to different escalation factors and differing estimates for total company payroll and total General Office and district employees for 2011 and 2012.

[13] Milliman is CWS' Pensions and Benefits actuarial consultants.

DRA recommends the following amounts (thousands of dollars) for Account 795, Pensions and Benefits:

	DRA		CWS	
	2011	**2012**	**2011**	**2012**
Total Account 795	$1,135.7	$1,142.3	$1,248.5	$1,268.3

All company benefits are accounted for in general operations and allocated to each of the districts using the four-factor method of allocation. In general benefit costs are a function of employee payroll dollars, and/or the number of employees. The following is a breakdown of the sub-accounts included in the total Account 795 Pensions and Benefits:

(a) **Account 7951-1 Retirement Savings Plan.**

CWS provides employees with a 401(k) program and matches 50% of employee contributions up to 8% of payroll or the statutory contribution limit, whichever is less. Therefore, CWS' maximum contribution is 4% of company payroll. However, not all employees participate in the program. Based on actual participation levels, CWS' matching contribution during the last five years, was approximately 3%. This rate was used by CWS to forecast the test year amount, and is in line (or comparable) to those offered by other California utilities.[14]

DRA estimated the test year contribution based on the five-year average contribution percentage of 3%, which was multiplied by DRA's estimate of total company payroll (in 2011 and 2012).

[14] The 3% rate is in line with the 401(k) plans offered by San Jose Water, PG&E, Southern California Edison, and Sempra Energy. See the Milliman analysis, CWS General Report, Tab 12.

(b) **Account 7951-2 Retirement Fund.**

CWS' pension funding estimate is based on an actuarial forecast from Milliman. The Milliman analysis also reflects a unit cost per employee which DRA and CWS applied to the estimated number of employees to arrive at the test year's estimate. DRA and CWS' estimates differ because of different escalation factors and different estimates for total employees in the General Office and all districts.

The Milliman forecast is based on certain assumptions such as population growth, payroll changes, and salary adjustments. The Milliman forecast also assumes a long term rate on plan assets of 6.75%, and a discount rate of 5.75% for the years 2011 through 2013. CWS follows FASB[15] Statement of Financial Accounting Standards (SFAS) No. 87, as modified by SFAS 132 and SFAS 158.[16] CWS has followed SFAS 87 since it became effective in 1987. Prior to 1987, CWS pension costs equaled the cash contributions to the pension plan determined in accordance with ERISA.[17] The test year projections are based on Milliman's actuarial valuation as of January 1, 2009 for determining the Net Periodic Benefit Cost under SFAS 87. The underlying pension costs assumptions were accepted by DRA.

DRA was persuaded that CWS had taken appropriate steps to mitigate the ratepayer impact of Plan costs. Further, CWS undertook the following measures to avail itself of the benefits provided under (a) The Pension Protection Act of

[15] Financial Accounting Standards Board.
[16] CWS' response to DRA Data Request JRC-2, Q.7.
[17] Employment Retirement Income Security Act, or Federal law.

2006, (PPA) and (b) The Worker, Retiree and Employer Recovery Act (WRERA) of 2008:[18]

(i) CWS fully complied with PPA and WRERA. CWS modified the actuarial cost method for purposes of determining the minimum funding requirement to the Unit Credit method. CWS also adopted the use of the "3-segment" interest rates (for the 2008 minimum funding requirement) and the "full yield curve" (for the 2009 minimum funding requirement). The actuarial valuations for 2008 and 2009 have shown that the contributions by CWS will satisfy the minimum funding requirements as modified by PPA and WRERA.

(ii) In December 2008, CWS made an election to voluntarily reduce its carryover balance (i.e., pre-PPA credit balance) of $1,537,616 as of January 1, 2008 to $0, so that such amount could be included in its plan assets. This was done in order to improve the plan's funded percentages under PPA. In 2009, CWS elected to use the "full yield curve" to determine the funding target under PPA. This increased the plan's funded percentage for 2009.

(c) **Account 7952- Group Health Insurance.**

CWS administers its own (self-insured) employee health care plan. The cost of health insurance is based on actual claims experience and not outside premium payments. The plans include Medical, Dental and Vision care. Further, the plans are on the PPO model where employees are encouraged to use network health care providers in order to minimize costs. CWS' estimate is based on an actuarial forecast from Milliman and includes employee contributions of $125 per month. The Milliman forecast assumes that overall medical cost inflation will

[18] CWS' response to DRA Data Request JRC-2, Q.1.

continue to be 10% annually for the forecast period.[19] The Milliman analysis also reflects a unit cost per employee which DRA and CWS applied to the estimated number of employees. DRA and CWS' estimate differs because of different escalation factors and different estimates for total employees in the General Office and all districts. The underlying forecast assumptions were accepted by DRA.

(d) **Account 7952-1 Retiree Group Health Insurance.**

CWS administers its own (self-insured) retiree health care plan. Therefore, costs for these plans are based on claims experience, not outside premium payments. The plans are on the PPO model, where employees are encouraged to use network providers in order to minimize costs. Further, retirees pay a monthly premium of $300 per person (a retiree and spouse pay $600 per month). This rate decreases to $144 per person when there is other coverage such as Medicare.

The retiree plan is funded in advance in accordance with SFAS 106, which requires that annual funding of the plan be based on an actuarial analysis of the expected future expense arising during the employee service time. CWS' estimate is based on an actuarial forecast from Milliman. The Milliman forecast assumes that overall medical cost inflation will continue to be 10% annually for the forecast period. The Milliman analysis also reflects a unit cost per employee which DRA and CWS applied to the estimated number of employees. DRA and CWS' estimate differs because of different escalation factors and estimates for total employees in the General Office and all districts. The underlying forecast assumptions, except for the escalation factors, were accepted by DRA.

[19] Dental and Vision care inflation is forecasted at 5% each for 2011 through 2013.

4) Transportation Expense

DRA addresses Transportation Expense in Chapter 3 Operations and Maintenance Expenses of this Report. DRA's estimate for transportation expenses is $ 20,900 for Test Year 2011; CWS' estimate for the same time period is $20,200; $700 less than DRA's. DRA's estimate for 2012 is $21,400; CWS' estimate for the same period is $20,700, or $700 less than DRA's.

5) Rent

CWS' estimates rental expense of $1,300 for Test Year 2011 and $1,300 for 2012.[20] DRA has verified the information regarding the Company's rental expense, and recommends adopting this estimate.

6) Administration Charges Transfer

Administration Charges Transfer represents credits for unregulated activity. CWS' estimate of $(81,700) for Test Year 2011, and $(81,700) for 2012, for Administration Charges Transferred based upon the last recorded year.[21] DRA reviewed CWS' workpapers and recommends adopting these estimates for Administration Charges Transferred.

7) Workers Compensation

CWS' estimates of $78,200 in Test Year 2011 and $86,200 in 2012 for Workers Compensation is based on actuarial expectations conducted by actuaries at Milliman USA ("Milliman"). An assumption embedded in the estimate is a provision to account for Workers' Compensation to include expected future payments from current employment.[22] In other words, instead of basing the costs

[20] Refer to Report on the Results of Operation and Prepared Testimony for the Los Altos District, Chapter 6.
[21] Refer to CWS' Formal Application Workpapers for the Los Altos District, Table 6-B.
[22] Refer to General Report on the Results of Operations and Prepared Testimony, pg. 62.

on the well-established "pay-as-you-go methodology" that the Commission has consistently utilized, CWS proposes changing to an accrual basis and including the amortization of past liabilities for which payments have not yet been made.

In the prior rate case, CWS requested the same methodology change. DRA disagreed and calculated a percentage reduction at the General Office level based on the 2002-2006 average for the prior Test Year 2008-2009. The Commission similarly applied DRA's recommended reduction to all the districts in that case. In Decision 08-07-008 (pages 25-26, Section 4.7 on Workers' Compensation), the Commission upheld the use of the "pay-as-you-go methodology" for accounting for Workers' Compensation insurance costs.

For the current rate case, DRA continues to disagree with CWS' proposed change in recovery methodology and recommends continuing the "pay-as-you-go methodology" for recovering this cost. To put in perspective CWS' current proposal for Test Year 2011, on a company-wide basis, i.e., 24 districts plus General Office, CWS' total proposed Workers' Compensation is $2,747,250. This amount is almost triple the total 2008 recorded amount of $992,800 and about 70% higher than the 2004-2008 five-year average (in 2009 dollars) of $1,643,900.

DRA reviewed the recorded amounts for Workers' Compensation for this District. DRA finds the recorded amounts for 2004 to 2008 are more reflective of the "pay-as-you-go methodology" for accounting for Workers Compensation that the Commission approved in D. 08-07-008. DRA then took a five-year average of these recorded amounts, escalated the five-year average using DRA's labor escalation factors to derive its Test Year 2011 and 2012 forecasts of $78,200 and $78,900 respectively for the Mid-Peninsula District.

DRA recommends adopting its estimate for Workers Compensation for the Test Year's for this District.

8) Nonspecific Expenses

Nonspecific Expenses generally represent miscellaneous administrative and general expenditures. The Nonspecific Expenses account contains various sub-accounts. However, CWS does not provide estimated amounts for each sub-account for future years. Instead, it provides a compound figure for Nonspecific Expenses that are based on historical spending levels in all sub-accounts. CWS' Nonspecific Expenses estimates for the Test Year 2011 and 2012 of $60,500 and $62,100 respectively are based on a five-year average. DRA reviewed all sub accounts within Nonspecific expenses and adjusted some amounts for the years 2004 through 2008 under the following subaccounts: Account 792600 – Travel & Incidental Expense by $18,653, Account 792601 – Travel Meals Expense by $3,113, Account 792602 – Meals at CWS by $1,468, Account 792603 – Training and Seminars by $1,725, Account 799500 – Miscellaneous General Expense by $7,326, and Account 799501 - Moving Costs by $19,464. DRA then escalated its five-year average using DRA's composite escalation factors to derive its Test Year 2011 forecast. DRA recommends adopting its Nonspecific Expenses estimate of $49,000, and $50,300 for 2011 and 2012 forecasts respectively. CWS' Nonspecific forecast of $60,500, and $62,100 exceeds DRA's estimate by $11,500 and $11,800, or 23.5%, and 23.6% respectively for 2011 and 2012. DRA's reasons for these adjustments are described below:

(a) Account 792600 – Travel & Incidental Expenses

DRA identified expenditures in 2008 for apartment rentals. DRA believes that these expenditures are of no benefit to ratepayers, and removes them from DRA's estimate. DRA used a five-year average of recorded years 2004 to 2008 with the cost of the previously mentioned items removed.

(b) Account 792601 – Travel Meals Expense

DRA identified expenditures in 2004 -2008 for the Bayshore Christmas Lunch, a couple of Employee Celebration days, and food for same. DRA believes that the previously mentioned expenditures are of no benefit to ratepayers and removes them from DRA's estimate. DRA used a five-year average of recorded years 2004 to 2008 with the cost of the previously mentioned items removed.

(c) Account 792602 – Meals at CWS

DRA identified expenditures in this account from 2004 through 2008 for a Holiday Lunch Bayshore, an employee Retirement Lunch, as well as various supplies and food items for the parties. DRA believes that the previously mentioned expenditures were of no benefit to ratepayers, and removes them from DRA's estimate. DRA used a five-year average of recorded years 2004 to 2008 with the cost of the previously mentioned items removed.

(d) Account 792603 – Training and Seminars

DRA identified expenditures in this account from 2004 through 2008 for a Dog Training Seminar. DRA believes that the previously mentioned expenditure was of no benefit to ratepayers, and removes it from DRA's estimate.

(e) Account 799500 – Miscellaneous General Expenses

DRA identified expenditures in this account from 2004 through 2008 for Employee Celebration Days (4), Flowers, and frames. DRA believes that the previously mentioned expenditure was of no benefit to ratepayers, and removes it from DRA's estimate.

(f) Account 799501 – Moving Costs

DRA identified expenditures in 2007 and 2008 for this account, and removed them from its estimate because the size of the expenditures looked excessive. DRA believes that the previously mentioned expenditure was of no benefit to ratepayers, and removes it from DRA's estimate.

9) Amortization of Limited Term Investment

This expense pertains to the amortization of an intangible asset, such as capital planning studies. CWS estimates $5,000 for Amortization of Limited Term Investment. CWS bases its estimate from the general method for this expense shown on CWS' amortization schedule. DRA reviewed this account and recommends adopting of CWS' Amortization of Limited Term Investment estimate.

10) Dues and Donations Adjustment

The Dues and Donations Adjustment represents CWS' adjustment of non-professional dues paid historically, for ratemaking purposes. CWS' estimate for Dues and Donations Adjustment is ($900). DRA has reviewed CWS' workpapers and recommends adoption of CWS' Dues and Donations Adjustment estimate.

D. CONCLUSION

DRA recommends that the Commission adopt DRA's A&G Expenses for the Mid-Peninsula District.

TABLE 4-1

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

ADMINISTRATIVE & GENERAL EXPENSES

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
At present rates				
Oper. Rev. less uncoll.	30,432.7	30,487.9		
Local Franchise Rate	0.0000%	0.0000%		
Franchise tax	0.0	0.0	0.0	0.0%
Payroll	257.6	320.8	63.2	24.5%
Benefits	1,135.7	1,248.5	112.8	9.9%
Transportation Expenses	20.9	20.2	-0.7	-3.3%
Rent	1.3	1.3	0.0	0.0%
Admin Charges Trsf	(81.7)	(81.7)	0.0	0.0%
Worker's Compensation	78.2	78.2	0.0	0.0%
Nonspecifics	49.0	60.5	11.5	23.5%
Amort of Limited Term Inv.	5.0	5.0	0.0	0.0%
Dues & Donations Adjustment	(0.9)	(0.9)	0.0	0.0%
Total A & G Expenses	1,465.1	1,651.8	186.7	12.7%
(incl. local Fran.)	1,465.1	1,651.8	186.7	12.7%
At proposed rates				
Oper. Rev. less uncoll.	35,823.4	35,879.9		
Local Franchise Rate	0.0000%	0.0000%		
Fran. tax	0.0	0.0	0.0	0.0%
Total A & G Expenses	1,465.1	1,651.8	186.7	12.7%
(incl. local Fran.)	1,465.1	1,651.8	186.7	12.7%

CHAPTER 5: TAXES OTHER THAN INCOME

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations on Taxes Other Than Income for the Mid-Peninsula District of California Water Service's (CWS) Test Year 2011 General Rate Case. The category of Taxes Other Than Income is comprised of ad valorem (property taxes), business license fees, local franchise fees, and payroll taxes.

B. SUMMARY OF RECOMMENDATIONS

Differences between CWS' and DRA's estimates for Taxes Other Than Income are primarily due to differences in revenue, plant and payroll estimates. The methodologies used by CWS in estimating future taxes and fees are detailed below. Anywhere DRA has made adjustments to improve the consistency or accuracy of estimates has also been noted below.

C. DISCUSSION

1) AD VALOREM TAXES

CWS estimates future ad valorem taxes using the actual ad valorem tax percentage from the last recorded year. This percentage is applied to the following year's estimated net total of utility property accounts.[23] The pro-forma ad valorem estimate is the arithmetic average of the two years. DRA accepts this methodology and notes that differences between CWS and DRA estimates are due to differences in estimations of future plant.

[23] Net Total of Property = plant + materials & supplies + construction work in progress + present value of advances – advances & contributions – deferred income tax

2) BUSINESS LICENSE and LOCAL FRANCHISE FEES

San Mateo business license fees are charged directly to customers as a surcharge and are not part of the summary of earnings. San Carlos francise fees are charged directly to customers as a surcharge and are not part of the summary of earnings.

3) PAYROLL TAXES

CWS estimates future payroll taxes using projected payroll amounts and the effective tax rates from the last recorded year. The three components of payroll taxes are Federal Insurance Contributions (FICA), Federal Unemployment Insurance (FUI) and State Unemployment Insurance (SUI). All three components have statutory limits governing the maximum percentage that can be collected from employers (*see table, below*).

PAYROLL TAXES		2009 MAXIMUM	EXPLANATORY NOTES
FICA	Social Security Tax	6.2%	Social Security Tax is 6.2% applied to only the first $106,800 of an employee's salary.
	Medicare Tax	1.45%	
FUI Tax		0.8%	Federal Unemployment Tax is 6.2% reduced by an offset credit of up to 5.4% for a total of 0.8% on the first $7,000 of employee wages ($56 per employee).
SUI Tax (CA)		6.3%	State Unemployment Taxes vary by company from 1.5% to 6.2% plus an Employment Training Tax Rate of 0.1% for a maximum tax percentage of 6.3%.

In general, DRA accepts the methodology utilized by CWS to estimate future payroll taxes. An adjustment was made by DRA to the imputed FICA percentage used by CWS for the Mid-Peninsula District (8.25%) to coincide with the maximum tax (7.65%) that can be collected for the combined Social Security and Medicare Taxes (see table above). All other differences between DRA and CWS estimates result from differences in estimates of future payroll.

D. CONCLUSION

DRA recommends Commission adoption of DRA's estimates of Taxes Other Than Income that are presented in Tables 5-1.

TABLE 5-1

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

TAX DEDUCTIONS AND CREDITS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Ad Valorem taxes	427.8	512.2	84.4	19.7%
Local Franchise (pres rates)	0.0	0.0	0.0	0.0%
Local Franchise (CWS prop rates)	0.0	0.0	0.0	0.0%
Social Security Taxes	133.7	178.9	45.2	33.8%
Business License (pres rates)	0.0	0.0	0.0	0.0%
Business License (CWS prop rates)	0.0	0.0	0.0	0.0%
Taxes other than income (present rates)	561.5	691.1	129.6	23.1%
Taxes other than income (CWS proposed rates)	561.5	691.1	129.6	23.1%
State Tax Depreciation	1,966.3	2,267.9	301.6	15.3%
Transp. Dep. Adj.	(48.3)	(69.3)	(21.0)	43.5%
State Tax Deduct(pres rates)	1,918.0	2,198.6	280.6	14.6%
State Tax Deduct (CWS prop rates)	1,918.0	2,198.6	280.6	14.6%
Fed. Tax Depreciation (pres rates)	1,079.6	1,245.2	165.6	15.3%
State Income Tax (pres. rates)	500.3	148.9	(351.5)	-70.2%
State Income Tax (CWS prop rates)	976.9	625.5	(351.3)	-36.0%
Pre. Stock Div. Credit	0.0	0.0	0.0	0.0%
DPAD (pres. Rates)	0.0	0.0	0.0	0.0%
DPAD (CWS prop. Rates)	0.0	0.0	0.0	0.0%
Fed. Tax Deduct.(pres rates)	1,580.0	1,394.1	(185.9)	-11.8%
Fed. Tax Deduct (CWS prop rates)	2,056.5	1,870.7	(185.8)	-9.0%

CHAPTER 6: INCOME TAXES

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations on Income Taxes for the Mid-Peninsula District of California Water Service (CWS) Test Year 2011 General Rate Case. In developing its recommendations, DRA reviewed the reports, workpapers, and data responses of CWS in conjunction with information obtained from the California Franchise Tax Board and the Internal Revenue Service.

B. SUMMARY OF RECOMMENDATIONS

The majority of the differences between CWS and DRA estimates of Income Taxes are attributable to differences in estimated revenue, expenses, and rate base. Anywhere DRA has made adjustments to the estimating methodology used by CWS is detailed below. The three areas in which DRA made adjustments to CWS calculations for Mid-Peninsula pertain to the: (1) federal deduction of the California Corporate Franchise Tax, (2) California Corporate Franchise Tax total percentage, and (3) calculation of the interest expense deduction.

C. DISCUSSION

1) DRA ADJUSTMENTS

(a) Federal Deduction of California Corporate Franchise Tax (CCFT)

D.89-11-058, issued in November of 1989, required that the prior year's CCFT be used as the deduction for calculation of test year federal income taxes. As discussed throughout the decision, companies at that time were required to pay estimated California taxes one year in advance.[24] D.89-11-058 corrected the

[24] California Revenue and Taxation Code, Part 11, Chapter 2, Article 2, Section 23151(f)(2)

timing difference between when companies had previously paid California taxes and when they had realized such payment as a deduction for federal income taxes.

Since 1989, the California Tax Code has changed so that corporations are no longer required to make estimated CCFT payments to the state one year in advance. In fact, California tax law now requires corporations to compute an estimated tax "upon the basis of the net income for that taxable year."[25] As such, DRA recommends using the current year's CCFT as a deduction in the current year's calculation of federal income taxes. Differing from D.89-11-058 yet more representative of current California tax practice, DRA's methodology provides a more accurate estimate of a utility's assumed tax consequences and revenue requirements. More importantly, consistent with long-standing regulatory tradition and Generally Accepted Accounting Procedures (GAAP), the DRA methodology more closely adheres to the fundamental "matching principle," where costs incurred in a given period should be matched against the revenue or benefits received in the same period.

(b) California Corporate Franchise Tax Total Percentage

Referencing D.84-05-036 yet failing to cite the specific ordering paragraph, section, or discussion, CWS added six-basis points to the CCFT percentage used to estimate state taxes for test year and escalation years. Through data requests, review of Commission decisions, and personal interviews, DRA attempted to find some justification for CWS' inclusion of an additional 0.06% in state tax estimates. Unable to substantiate the validity of this addition, DRA removed the percentage, which reduced CCFT estimates by 0.06%.

[25] Ibid

(c) Calculation of the Interest Expense Deduction

A formula error in CWS' workpapers for calculating the Interest Expense Deduction resulted in Working Cash being subtracted from Rate Base. DRA has corrected this error in the calculation of the deduction for Mid-Peninsula. The recommended Interest Expense Deduction now equals Rate Base (including working cash) multiplied by the current CWS weighted-average-cost-of-debt (3.16%).[26]

2) GENERAL INCOME TAX CALCULATIONS

In calculating income taxes, both DRA and CWS subtract common expenses from estimated revenue. For the calculation of state taxes, CWS has calculated tax depreciation amounts to reflect the required flow-through of deferred tax benefits, while federal tax depreciation amounts reflect the requirements of normalization. This methodology is consistent with the requirements of the Economic Recovery Act of 1981, the Tax Equity and Fiscal Responsibility Act of 1982, and the Tax Reform Act of 1986.

D. CONCLUSION

DRA recommends Commission adoption of DRA's estimates of Income Taxes that have been calculated and presented in Tables 6-1 and 6-2.

[26] D.09-05-019: Base Year 2009 Cost of Capital for the three large multi-district Class A Water Utilities

TABLE 6-1

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

TAXES BASED ON INCOME

TEST YEAR 2011

(PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	30,466.5	30,521.8	55.3	0.2%
Deductions:				
O & M expenses	16,820.8	18,815.8	1,995.0	11.9%
A & G expenses	1,465.1	1,651.8	186.7	12.7%
G. O. Prorated expenses	3,194.9	4,305.7	1,110.8	34.8%
Exclude GO Book Depreciation	(426.1)	(495.1)	(69.0)	16.2%
Taxes not on Income	561.5	691.1	129.6	23.1%
Transportation Deprec Adj	(48.3)	(69.3)	(21.0)	43.5%
Interest	1,272.5	1,681.2	408.7	32.1%
Income before taxes	7,626.1	3,940.6	(3,685.5)	-48.3%
~~Calif. Corp. Franchise Tax~~				
State Tax Deductions	(1,966.3)	(2,267.9)	-301.6	15.3%
Taxable income for CCFT	5,659.8	1,672.7	(3,987.0)	-70.4%
CCFT Rate	8.84%	8.84%		
Additional Tax per D.84-05-036	0.0	1.0	1.0	0.0%
CCFT	500.3	148.9	(351.5)	-70.2%
~~Federal Income Tax~~				
Tax Depreciation	1,079.6	1,245.2	165.6	15.3%
State Corp Franch Tax	500.3	148.9	(351.5)	-70.2%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	6,046.2	2,546.6	(3,499.6)	-57.9%
Domestic Prod. Activities Ded.	0.0	0.0	0.0	0.0%
Adjusted Taxable Income	6,046.2	2,546.6	(3,499.6)	-57.9%
FIT Rate	35.00%	35.00%		
FIT	2,116.2	891.3	(1,224.9)	-57.9%
Investment Tax Credit	10.1	10.1	0.0	0.0%
Total FIT	2,106.1	881.2	(1,224.9)	-58.2%
Total FIT & CCFT	2,606.4	1,030.0	(1,576.4)	-60.5%

TABLE 6-2

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

TAXES BASED ON INCOME

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	35,863.2	35,919.7	56.5	0.2%
Deductions:				
O & M expenses	16,826.8	18,821.7	1,995.0	11.9%
A & G expenses	1,465.1	1,651.8	186.7	12.7%
G. O. Prorated expenses	3,194.9	4,305.7	1,110.8	34.8%
Exclude GO Book Depreciation	(426.1)	(495.1)	(69.0)	16.2%
Taxes not on Income	561.5	691.1	129.6	23.1%
Transportation Deprec Adj	(48.3)	(69.3)	(21.0)	43.5%
Interest	1,272.5	1,681.2	408.7	32.1%
Income before taxes	13,016.8	9,332.6	(3,684.3)	-28.3%
Calif. Corp. Franchise Tax				
State Tax Deductions	(1,966.3)	(2,267.9)	-301.6	15.3%
Taxable income for CCFT	11,050.5	7,064.7	(3,985.8)	-36.1%
CCFT Rate	8.84%	8.84%		
Additonal Tax per D.84-05-036	0.0	1.0	1.0	0.0%
CCFT	976.9	625.5	(351.3)	-36.0%
Federal Income Tax				
Tax Depreciation	1,079.6	1,245.2	165.6	15.3%
State Corp Franch Tax	976.9	625.5	-351.3	-36.0%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	10,960.3	7,461.8	(3,498.5)	-31.9%
Domestic Prod. Activities Ded.	0.0	0.0	0.0	0.0%
Adjusted Taxable Income	10,960.3	7,461.8	-3498.5	-31.9%
FIT Rate	35.00%	35.00%		
FIT	3,836.1	2,611.6	(1,224.5)	-31.9%
Investment Tax Credit	10.1	0.0	(10.1)	-100.0%
Total FIT	3,826.0	2,611.6	(1,214.4)	-31.7%
Total FIT & CCFT	4802.9	3237.2	(1,565.7)	-32.6%

CHAPTER 7: UTILITY PLANT IN SERVICE

A. INTRODUCTION

DRA's and CWS' estimates for the Mid-Peninsula District Plant in Service for the Test Year 2011 and Escalation Year 2012 are shown in Tables 7-1 and 7-2 at the end of this chapter.

DRA reviewed and analyzed CWS' testimony, application, Minimum Data Requirements, workpapers, capital project details, estimating methods, and responses to various DRA data requests. DRA also conducted a field investigation of most of the proposed specific plant additions before making its own independent estimates including adjustments where appropriate. Important and significant differences between DRA's and CWS' estimates of specific plant additions are attributed to the items listed in Table 2.

B. SUMMARY OF RECOMMENDATIONS

DRA recommends that 1) plant additions for 14 specific projects in 2009 be disallowed, adjusted, or approved for Advice Letter treatment; 2) plant additions for 17 specific projects in 2010 disallowed or adjusted,; 3) plant additions for 17 specific projects in 2011 be disallowed, adjusted, or deferred; 4) plant additions for 9 specific projects in 2012 be disallowed or adjusted; 5) plant additions for carryover projects be adjusted to reflect DRA's estimates; and 6) plant additions for non-specifics in 2009 through 2012 be adjusted to reflect DRA's escalation factors. Based on these recommendations, DRA's estimates for the 2009, 2010, 2011 and 2012 plant additions are $2,167,900, $3,731,500, $2,115,000, and $3,488,400, respectively versus CWS' proposed amounts of $5,806,500, $11,360,300, $9,042,100, $17,735,200, respectively for the same years.

Table 7-A. Mid-Peninsula District

Company funded Plant Additions, Including Carryovers and Non-Specifics (Thousands of Dollars)

	2009	2010	2011	2012	AVG
DRA	$2,167.3	$3,739.2	$2,094.3	$3,496.5	$2,874.3
CWS	$5,806.5	$11,360.3	$9,042.1	$17,735.2	$10,986.0

Table 7-B. Specific Projects Differences Comparison

Budget Year	Project ID Number	Category	Project Description	CWS Proposed Budget ($)	DRA Proposed Budget ($)
2009	16879	Storage	Tank Turnover Equipment - Sta. 24 T1 & T2 - Yorktown Tanks	$90,300	$0
2009	16890	Storage	Upgrade Booster - Sta. 118-C - San Carlos	$57,100	$0
2009	17096	Pumps	Replace Pump - Sta. 117-B	$32,200	$0
2009	17097	Pumps	Replace Pump - Sta. 27-A	$57,100	$0
2009	17241	Wells	Drill San Mateo Well #1	$158,400	Keep AL with $156,500 cap
2009	17242	Wells	Drill San Mateo Well #2	$172,000	Keep AL with $156,500 cap
2009	17243	Wells	Drill San Mateo Well #3	$172,000	Keep AL with $156,500 cap
2009	17244	Pumps	Equip Well #1- Electrical - San Mateo	$258,800	Keep AL with $258,800 cap
2009	17245	Pumps	Equip Well #2- Electrical - San Mateo	$258,800	Keep AL with $258,800 cap
2009	17246	Pumps	Equip Well #3 - Electrical - San Mateo	$258,800	Keep AL with $258,800 cap
2010	17937	Structures	Security Mitigation Improvement - San Carlos	$127,824	$0
2009	18341	Hydrants	Hydrants - Palm	$45,400	$0
2009	18341	Mains	Palm - Hillcrest, Arundel, & Phelps	$435,200	$0
2009	18341	Services	1" Services - Palm	$152,200	$0
2009	20294	Storage	3.0 MG Concrete Reservoir - Design - Sta. 6 - Crystal Springs Reservoir - San Mateo	$44,600	$0
2010	20093	Intangible Plant	Planning Study to Evaluate Emergency Storage & Supply - San Mateo & San Carlos	$34,100	$0

2010	20107	Storage	Tank Turnover Equipment - Sta. 118 Tanks 1 & 2 - San Carlos	$99,300	$0
2010	23367	Storage	Paint Interior Under Side of Roof Complete & 11 feet of Upper Shell Area - Sta. 27-T2 - San Mateo	$275,580	$181,966
2010	20593	Pumps	Replace Pressure Vessel - Sta. 26	$100,000	$0
2011	20141	Storage	Design 4MG Storage Tank - Borel, Sta. 22, Bresford, & Wilshire System - San Mateo	$66,600	$0
2012	20141	Storage	4MG Storage Tank - Borel, Sta. 22, Bresford, & Wilshire System - San Mateo	$4,873,000	$0
2010	20166	Pumps	Relief Valve ByPass - Sta. 118	$71,300	$0
2010	20267	Pumps	Generator - Sta. 106	$154,000	$0
2010	20268	Pumps	Generator - Sta. 26	$154,000	$0
2010	20272	Pumps	Replace Panelboard - Sta. 23	$164,000	$155,405
2010	20274	Pumps	Replace Panelboard - Sta. 25	$164,000	$155,405
2011	20275	Pumps	Generator & Replace Panelboard - Sta. 17	$248,000	$0
2011	20277	Pumps	Replace Panelboard - Sta. 114	$169,000	$0
2012	20284	Pumps	Generator - Sta. 116	$95,000	$0
2012	20287	Pumps	Replace Panelboard - Sta. 6	$174,000	$0
2012	20294	Storage	3.0 MGAL Concrete Reservoir - Sta. 6 - Crystal Springs Reservoir - San Mateo	$6,743,826	$0
2010	20315	Pumps	Energy Monitoring Program	$148,200	$0
2011	20315	Pumps	Energy Monitoring Program	$153,000	$0
2012	20315	Pumps	Energy Monitoring Program	$157,000	$0
2011	20403	Pumps	Equip Booster Pump Station - Zone 145 to Zone 290 - Field Yard - San Mateo	$232,900	$0
2011	20403	Structures	Pumphouse & Site Improvements - Booster Pump Station - Zone 145 to Zone 290 - Field Yard - San Mateo	$80,300	$0
2010	20492	Mains	Lynton Ave. & Oakley Ave.	$358,100	$0
2010	20502	Field	Ice Machine - Field Yard	$3,400	$0
2010	20532	Storage	Design Rebuild - Sta. 103 Tank 1	$43,900	$0
2011	20532	Pumps	Replace Booster & Panelboard Sta. 103 Tank 1	$611,500	$0
2011	20532	Storage	Design Station & Tank Replacement - Rebuild Sta. 103 Tank 1	$254,900	$0
2011	20533	Storage	3.5 MG Storage Tank - Zone	$2,220,500	$0

			200 - San Carlos		
2010	20536	Mains	Additional 4" PRV - Palomar Drive - Zone 525	$54,800	$0
2010	20567	Pumps	Replace Splitcase Pump & Upgrade Motor - Sta. 116-A	$54,000	$0
2010	20569	Pumps	Replace Splitcase Pump & Upgrade Motor - Sta. 25-A	$53,000	$0
2011	20572	Pumps	Replace Split Case Pump with Top Drive Can Booster, Upgrade Motor & Electrical - Sta. 114-B	$92,000	$0
2011	20572	Structures	Site Improvements - Doghouse - Sta. 114-A	$12,000	$0
2011	20638	Hydrants	Hydrants - 31st Ave. - San Mateo	$60,500	$0
2011	20638	Mains	31st Ave. - San Mateo	$543,300	$0
2011	20638	Services	4" Services - 31st Ave. - San Mateo	$22,400	$0
2011	20638	Services	1" Services - 31st Ave. - San Mateo	$66,100	$0
2011	20656	Pumps	Replace Splitcase Pumps, Upgrade Motors, & Add Energy Efficient Monitoring - Sta. 12-C&D	$79,000	$0
2011	20108	Storage	Tank Turnover Equipment - Sta. 30 Tank 1 - San Mateo	$55,200	$0
2012	20110	Storage	Tank Turnover Equipment - Sta. 123 Tank 1 & 2 - San Carlos	$104,300	$0
2012	21331	Storage	Paint Exterior Roof, Underside of Roof & 8' Upper Shell - Sta. 27 Tank 1 - Beresford	$385,000	$269,984

C. DISCUSSION

The Mid-Peninsula District has recorded $3,144,100 in average gross plant additions during the past five years (2004-2008).[27] The district's average gross plant addition request for the period of 2009-2012 is $11,489,100 which represents an unprecedented 265% increase over historical recorded plant additions. It should be emphasized that the recorded plant additions themselves have exceeded the Commission authorized gross plant addition budgets during 2004-2008 by

[27] Gross plant additions include company funded plant additions as well as contributions and advance deposits for specific plant.

$3,085,300 which represents a 24% budgetary overrun of authorized additions for that period.[28] Because these additions have not been authorized (they are only mentioned once in a misleading sentence next to an unexplained table comparing authorized to recorded capital additions in Chapter 8 of the RO report) they escape reasonableness review while significantly increasing rates.

DRA issued multiple data requests investigating the significant mismatch between authorized and recorded capital additions for the last five years.[29] In its responses, CWS did not offer any meaningful explanation of the differences other than the fact that contributions and advances are estimated in the authorized additions column, while they derive from actual figures in recorded additions. DRA considers this level of recorded plant additions excessive, not compliant with previous Commission orders, and therefore recommends a systematic audit of actual capital additions and authorized budgets in the subsequent GRC, as was ordered in D.03-09-021 for all future CWS general rate cases.[30] On page 54 of that Decision, it states:

> "We will, therefore, require that Cal Water submit a report in each of its future district general rate case filings showing budgeted capital projects and actual expenditures. We expect these reports to compare the budgeted capital projects to actual expenditures, and to explain each deviation and deferral, with revised in-service dates for

[28] CWS Response to MD7-001.

[29] DRA data requests MD7-001 and NKS-007.

[30] According to CWS Response to DRA data request NKS-007, CWS does not believe it needs to comply with Order 3 of D.03-09-021 which states, "In all future general rate case applications, Cal Water shall present an initial showing with the major changes that led to the requested change identified and quantified. Each issue should include detailed explanations and justifications for the requested change, with cross-references to evidentiary support. All tables of data should be explained and analyzed. All necessary evidence should be included in the record."

the deferrals. We will use this historic analysis to guide our evaluation of any proposed capital projects."

On a going-forward basis, DRA's recommendation of $3,378,800 in average gross plant additions during 2009-2012 is 7.5% greater than historically authorized levels.

1) Carryover Projects

CWS identifies $2,298,960 in 2009 and $4,622,400 in 2010 for carryover projects respectively in its ratebase workpapers (totaling $6,921,360) not including equipment carryovers allocated between Mid-Peninsula and South San Francisco Districts. In the Results of Operation report for the Bear Gulch District, CWS identifies $6,112,000 in carryover projects. DRA was not able to reconcile the two estimates, even after a clarifying data request was sent.

Based upon the CWS response to the data request MD7-008 on all carryover projects, DRA calculated its carryover estimate by subtracting advice letter projects from the carryover totals, since advice letter projects have uncertain costs and completion dates, and may not occur at all.[31] DRA estimates the carryover projects budget as $268,100 in 2009 for a hydraulic model and a seismic retrofit of tank 123.

CWS lists carryover project 15999 for replacing redwood tanks at Station 122 with a steel bolted tank. According to the last decision both DRA and CWS agreed to remove the project from the 2007 GRC, with possible deferral to the next rate case. This does not imply that the project should be listed as a carryover, which would require previous approval by the Commission. DRA did request information on this project, believing erroneously that it was previously approved.

[31] Advice Letter projects are handled separately though a rate base offset.

CWS has decided to build a 20,000 gallon tank which will provide "emergency and operational storage" equal to 8 hours of average day demand. DRA emphasizes that the proposed tank is very small and the unit costs are quite high ($14/gallon compared to other storage projects in the district of less than $1 per gallon).

CWS admits that it still has not resolved the issue of the landowner refusing to grant a conditional use permit since 2004, but that it "expects to resolve these issues shortly." DRA is not convinced that anything has actually changed since CWS has not obtained a county permit to begin construction. CWS further states that the existing arrangement of using a pressure relief valve (PRV) from zone 850 to feed zone 525 is "inefficient" but lists no cost savings or efficiency gains in quantitative terms due to installing the new tank.[32] The recently demolished redwood tanks had been out of service since 1996 without any documented reduction in service quality to nearby residents. In the event of an emergency in zone 525, water can either be pumped up from Station 121 or fed down from Station 124 in zone 640 through a PRV. Therefore, this project is unnecessary, unsubstantiated and likely to face further delays. DRA recommends this project be disallowed and has removed its cost from capital addition carryovers listed by CWS.

In a similar fashion, CWS lists project 18317, Upgrade DPH Sample Sites, as a carryover project with a budget of $105,300, which was removed from the last GRC. DRA did request information on this project, believing erroneously that it was previously approved. According to the invoice provided by CWS, 22 sample sites were replaced at a total invoiced cost of $36,389.[33] CWS requested in this

[32] According to the district's WS&FMP, there are two PRV's between zone 640 and zone 525, but no direct connection between zone 525 and zone 850.

[33] CWS response to DRA DR MD7-002, Question 6.

rate case to replace a total of 39 sample sites, thus the total cost should be $64,500. DRA recommends CWS utilize its non-specific budget for these capital additions, since this is not a carryover project and CWS was not forthright in describing the ratemaking treatment.

CWS lists carryover project 9670 (total budget of $800,500) for a new well in San Mateo as completed and in-service in response to MD7-008, but stated that the project was canceled in an earlier response.[34] The $800,500 in costs should be removed from carryover capital additions and DRA has removed them from its capital budget estimate.

Other projects such as 11519 and 11521 for a new customer service and operations center ($3,223,700 cap), projects 17218-17220 to acquire land for three new wells ($459,000 cap each), projects 17241-17243 for new well construction ($156,500 cap each), and projects 17244-17246 to equip the new wells ($258,800 cap each) were approved in the last GRC with advice letter treatment and specific caps. CWS seeks to move the new well construction and equipping projects into rates in this GRC without following the advice letter process and with some increased costs. The advice letter deadline for these projects is the effective date for new rates in the current GRC, which is January 1, 2011.[35] DRA recommends that these projects remain as advice letter projects with the existing deadlines and caps. CWS has not provided any compelling evidence that these projects should be moved into rates at this time given the slow pace of well construction and delays in building the new customer service center, or that the costs should be increased.

[34] CWS response to DRA DR MD7-002, Question 3. CWS stated that only $21,754 in costs had been incurred.

[35] Settlement between CWS and DRA in A.07-07-001, approved in D.08-07-008.

2) Main Replacement Program

CWS proposes a main replacement budget of $992,000 in 2009, $2,560,626 in 2010, $1,574,300 in 2011 and $1,734,800 in 2012 plant additions for a total of $6.9 million. CWS' proposed average main replacement budget is $1,715,400 per year, which is a 204% increase over the five year average internal CWS budget of $564,620.[36] It should be noted that although the historical CWS budgets are much lower than CWS' proposal in this GRC, the historical budgets do not correspond to any Commission authorized level of main replacement.[37] As well, the historical CWS' budgets do not necessary relate to actual main replacement costs during that time period. CWS declined to provide historical costs for mains, services, hydrants and meters to DRA, despite multiple data requests.[38] In the absence of actual main replacement cost data, DRA recommends a main replacement budget of $450,500 in 2009, $1,218,800 in 2010, $489,800 in 2011, and $948,600 in 2012 for a total budget of $3.1 million. DRA's average recommendation is $579,000 per year[39] which is 3% more than the five year average internal CWS historical budget. DRA's budget also recommends replacement of 5,412 feet of main per year, of which a large majority are small mains less than 6" in diameter.

[36] CWS General Report on the Results of Operation and Prepared Testimony, July 1, 2009, Appendix 7.

[37] Email communication with Tess Cayas of CWS, on January 5 2010.

[38] See non-responsive CWS answers to DRA data requests MD7-016 and NKS-005.

[39] This recommendation does not include the DRA recommended non-specific main replacement budget of approximately $162,000 per year.

Table 7-C. CWS Historical Main Replacement Budget and Weighted Average Unit Costs

Mid-Peninsula	CWS Mains Budget ($)	Mains Length (ft)	Cost/Foot
2004	$567,100	5,884	$96
2005	$563,100	4,579	$123
2006	$704,000	5,775	$122
2007	$476,000	2,740	$174
2008	$512,900	4,184	$123
AVG	**$564,620**	**4,632**	**$122**

CWS' claimed justification for these projects usually asserts either numerous leaks or fireflow improvements as a justification for replacement of these mains, services and hydrants.

(a) **Fireflow:** In terms of fire flow, according to GO 103-A, "The utility shall not be responsible for modifying or replacing at its expense any existing facilities, which are otherwise adequate, in order to provide increased fire flow or duration due to changes in the standards after the initial construction."[40] CWS' replacement of pipe merely to improve fireflow cannot therefore be justified.

(b) **Leaks/100 miles of main:** Further, CWS provided the following response to ALJ O'Donnell's request for an exhibit showing CWS' methodology for mains replacement, "CWS annually determines the number of leak for each district on the basis of leaks per one hundred miles of main. This information along with the actual length of targeted mains in a district is used to set the annual target main replacement length." However, when DRA asked for the leaks per

[40] GO 103-A, VI. Fire Protection Standards, 3.Replacement of Mains A.Changes to Fire Code, p.25.

one hundred miles of main for projects in this GRC, CWS was unable to provide such information.[41]

(c) **Repair vs replacement:** When DRA asked CWS how it concluded a particular targeted main was beyond its "useful life", CWS responded: "In reality, one can extend the "useful life" of many facilities, but the cost to do so may outweigh the cost to replace."[42] However when DRA asked CWS if it did any analysis to show that the cost to repair was higher than the cost to replace for the targeted mains in this general rate case, CWS said it had not done such an analysis.[43]

DRA therefore concludes that CWS' is not able to effectively prioritize its specific hydrant, main and service replacement projects based on actual conditions of the pipe and using tools such as AWWA's "Decision Support System for Distribution System Piping Renewal", which have been available since 2002.[44] DRA notes that other utilities, such as California American Water Company, routinely prepare a "Condition Based Assessment" document prepared by a licensed professional engineer to assess the condition of their transmission and distribution systems, in each district to identify and prioritize investment in transmission and distribution infrastructure.[45]

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[41] CWS' response to DRA data request NKS-006, question 7, attached in Appendix B to the Chico District Report.

[42] CWS' response to DRA data request NKS-002, question 11, attached in Appendix B to the Chico District Report.

[43] CWS' response to DRA data request NKS-002, question 8, attached in Appendix B to the Chico District Report.

[44] In its response to DRA data request NKS-002, question 12, CWS replied it had not used this or a similar tool to evaluate its mains targeted for replacement in this general rate case. The response is attached in Appendix B to the Chico District Report..

[45] For example, in A.08-01-027, Cal Am conducted a condition-based assessment of its infrastructure for its Monterey district, and prioritized its proposals in that rate case based on the condition of the infrastructure.

Table 7-D. Comparison between DRA and CWS Budgets and Average Unit Costs

Mid-Peninsula District	CWS Mains Budget	DRA Mains Budget	% Disallowance	DRA Unit Cost ($/ft)	CWS Unit Cost ($/ft)
2009	$992,000	$450,468	55%	121	123
2010	$2,560,626	$829,234	68%	122	204
2011	$1,574,300	$256,200	84%	122	208
2012	$1,734,800	$780,190	55%	122	205
AVG	$1,715,400	$579,023	66%		

DRA based its recommendation on several factors. First, the weighted average cost per foot budgeted for replacement by CWS in the Mid-Peninsula District was determined to be $122 per foot. On a project by project basis, DRA examined the reasonableness of the main replacement proposed based upon any leak history provided,[46] DRA's calculated break rate, fire flow deficiencies, water quality concerns, pipe material type and vintage. For projects that DRA agreed were necessary and reasonable, the total costs for the main related portions of the project were adjusted by multiplying the feet of main to be replaced by $122 per foot to produce an average representative budget.

In most project justifications, CWS states that main replacement projects in the Bayshore District (Mid-Peninsula and South San Francisco) have historically averaged $150 per foot to install, including excavation, backfilling and paving. However, CWS provided no evidence of historical costs when DRA requested the information, so CWS' own budgetary estimates were used as a proxy instead.

DRA recommends disallowing the following projects: PID 18341, 20492, 20535, 20603, 20608, 20610, 20638, 20660, 20668, and 20669. CWS was unable

[46] Although CWS was unable to provide break rates per 100 miles of main, it did provide leak history for some projects in a few districts.

to produce any leak record documentation for these projects, even though CWS claimed that these sections of main had a history of leaks. DRA also recommends that the Commission direct CWS to develop a "condition-based assessment" prepared by a licensed professional engineer including a prioritization plan, a comparison of the cost to repair versus replacement, and an analysis of leaks/100 miles to justify its main replacement programs in future rate cases.

3) Hydrant Replacement Program, 2009 – 2012

CWS currently replaces fire hydrants both during main replacement and has a separate program in cooperation with the City of San Mateo Fire Office to replace high priority hydrants identified by the City based on current fire code standards. The City of San Mateo Fire Office program plans on replacing 30 high priority hydrants each year beginning in 2010, for a total of 90 hydrants. DRA generally supports hydrant replacement when the opportunity arises during main replacement and targeting of deficient hydrants for upgrades.[47]

DRA disagrees with the cost of some of the hydrant projects however. DRA requested hydrant replacement expenditures on an annual basis for each district, but CWS declined to answer, stating that "it does not track its annual cost of facilities in this manner."[48] CWS estimates that the recurring hydrant projects in cooperation with the City will cost between $5,043 and $5,343 per hydrant, in 2010 though 2012, respectively. CWS estimates average hydrant costs of $5,400 per hydrant during 2009 and 2010. In contrast, during 2012 and for some projects in 2011, CWS uses an average hydrant cost of $7,800 with no justification for the abrupt increase in price. Therefore DRA recommends adjusting the budget for all fire hydrant projects that it supports to reflect a cost of $5,400 per hydrant.

[47] Often dry barrel hydrants are replaced with wet barrel models which have separate valves at each hose connection allowing more flexibility during fire fighting situations.

4) Service Replacement, 2009 – 2012

CWS currently replaces service connections during main replacement projects in the Mid-Peninsula District. In Mid-Peninsula which includes San Mateo and San Carlos, a 1" service is budgeted on average to cost less than $1,600 in 2009 and $1660 in 2010. In 2012, the average cost increases to $2,660 per 1" service connection with no evidentiary support for the jump in costs. Furthermore, CWS requests a substantial non-specific service replacement budget of approximately $515,000 per year in addition to the $580,000 requested on an annual basis associated with main replacement. This is a total budget of approximately $1.1 million per year for service replacement. DRA recommends an average service replacement budget including non-specifics of $515,000 per year.

According to CWS' response to a DRA data request,[49] plant additions for all service sizes, for the last 5 years have averaged $480,000 in 2009 dollars assuming a 3% inflation factor. Thus, CWS is asking for $620,000 more per year for services than it has historically incurred in costs. DRA's budget for services provides an additional $35,000 per year to buffer any further price inflation and should be adequate to complete the supported main replacement projects.

5) Projects 20294, 20141 & 20533 – 3 MG Concrete Reservoir, Two 4 MG Storage Tanks, and 3.5 MG Storage Tank

CWS budgets $6,788,426 in capital additions for project 20294 to replace the concrete reservoir at Station 6 (Crystal Springs), $4,939,600 in capital additions for project 20141 to add 8 MG of storage to Zone 145 in San Mateo and

(continued from previous page)
[48] CWS Response to MD7-016, Question 1.
[49] CWS response to DRA data request MD7-001, Question 1.

$2,220,500 in capital additions for project 20533 to add 3.5 MG of storage to Zone 200 in San Carlos.

CWS proposes to replace the existing, but out of service, Crystal Springs reservoir in order to meet an alleged 12.3 MG storage deficit in Zone 145 (San Mateo) along with two additional 4 MG tanks at a yet to be determined location. CWS also proposes a 3.5 MG tank in the 200 Zone of San Carlos to meet an alleged 2.85 MG storage deficit there based upon the WS&FMP (Water Supply & Facilities Master Plan) analysis. DRA strongly disagrees with this assessment. The WS&FMP performed a faulty and unsubstantiated analysis of the storage and pumping needs of the district. The WS&FMP lists three components of storage requirements as criteria for meeting storage standards. These components are operational (or equalization) storage which is assumed to be 25% of Maximum Day Demand (MDD) in the absence of a diurnal demand curve, fire reserve storage which is assumed to be the highest fire flow for the land use in each pressure zone of Mid-Peninsula District,[50] and finally emergency storage which is assumed to be 50% of MDD (or one average day demand). Zone 145 currently has no storage volume, but receives water from five SFPUC turnouts with a total capacity of 41.4 MGD.

DRA investigated all components of storage requirements claimed by the WS&FMP, and found that there is no governing standard for emergency storage in the state of California.[51] CWS claims in its WS&FMP that CDPH recommends an emergency storage component of at least 25% of the MDD and up to a

[50] In both zones 145 and 200, the WS&FMP calculates the fire reserve to be 0.63 MG based on 3,500 gpm for 3 hours. In zone 200, there is 0.68 MG of storage, which is more than sufficient, not counting the SFPUC excess capacity. In zone 145, gravity flow from higher elevation storage or excess SFPUC supply can easily meet fire flow requirements.

[51] CWS admits that the AWWA has no standard for emergency storage in response to DRA data request MD7-007, Question 5, and MD7-012, Question 2. Similar statements are made in many of the WS&FMP documents as well.

maximum of one average day demand (ADD). When DRA asked CWS to provide the exact citation and quote from the Drinking Water Regulations in Title 22, Chapter 16 where CDPH calls for a minimum emergency supply in each pressure zone equivalent to the average day demand, CWS was unable to do so.[52]

Instead, DRA discovered that CDPH recommends that public water systems should be able to meet 4 hours of Peak Hour Demand (PHD)[53] with storage, source capacity and/or emergency connections in each pressure zone.[54] In San Mateo, zone 145, the PHD is equivalent to 5.72 MG over a four hour period.[55] Most of the SFPUC turnouts feed the 145 zone, which can produce 6.9 MG over a 4 hour period, leaving a surplus of 1.2 MG which is more than enough to meet the 0.63 MG of fire reserve calculated by the WS&FMP.[56] Similarly in San Carlos, zone 200 has a total source capacity of 21.3 MGD which is 3.55 MG available over 4 hours. The PHD for zone 200 is only 0.96 MG over 4 hours[57] leaving a surplus of 2.6 MG available to that zone for fire flow, far more than the 0.63 MG required.

The CDPH standard is similar to what the WS&FMP refers to as the operational storage requirement, but the CDPH requirement allows source

[52] DRA issued data request MD7-013 on November 25, 2009 and received a response on January 27, 2010. CWS stated that the consultant who prepared the WS&FMP had used an out-dated reference that incorrectly cited pre-1994 CDPH drinking water standards.

[53] PHD is typically calculated by multiplying the MDD by a peaking factor of 1.5 according to CDPH, Drinking Water Regulations, Title 22, Chapter 16, Article 2, §64554. New and Existing Source Capacity (b)(1).

[54] CDPH, Drinking Water Regulations, Title 22, Chapter 16, Article 2, §64554. New and Existing Source Capacity (a)(1) for systems with more than 1,000 service connections.

[55] 34.3 MGD is the MDD in zone 145 times a 1.5 peaking factor to convert to PHD divided by 6 hours = 5.72 MG. At build out this increases to 6.1 MG based upon a MDD of 36.8 MGD.

[56] CDPH does not require meeting 4 hours of PHD and fire flow, but the comparison is meant to illustrate that CWS can meet fire flow and PHD in these zones, regardless.

[57] 5.77 MGD = PHD, divided by 6 hours = 0.96 MG.

capacity[58] and emergency connections to count on an equal basis with storage volumes in meeting the PHD standard. The WS&FMP creates an entirely separate category of emergency storage which has no precedent, above and beyond operational and fire reserve storage.[59]

In the event of a electrical power outage or other emergency, CWS has back-up power generators at pump Station 29 in San Mateo (2 MGD capacity) and Station 117 in San Carlos (3.24 MGD capacity), has four 125 HP portable boosters that can replace pumps in the event of catastrophic equipment failure or power outage. Furthermore, San Carlos has access to seven standby emergency connections, three with Belmont County Water District and four with Redwood City which tie into to zones 200 and 685.[60] San Mateo has access to twelve standby emergency connections, two with Belmont County Water District, three each with the City of San Mateo, Burlingame, and the Town of Hillsborough, and one with the Estero Municipal Improvement District, which tie into zones 145, 290 and 680.[61]

Therefore, the WS&FMP incorrectly states that there is currently a storage capacity deficit in the lower zones (145 and 200) of the Mid-Peninsula district. In actuality, the Mid-Peninsula District has more than sufficient storage, source capacity and emergency connections to meet all existing and build-out operational and fire reserve storage requirements. DRA has removed the capital costs associated with these projects from capital additions.

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[58] "Source capacity" means the total amount of water supply available, expressed as a flow, from all active sources permitted for use by the water system, including approved surface water, groundwater, and purchased water. CDPH, Drinking Water Regulations, Title 22, Chapter 16, Article 1, Definitions §64551.40.

[59] Fire reserve storage serves as an emergency storage in most situations.

[60] WS&FMP p.5-8.

[61] WS&FMP p.4-8.

6) Projects 16879, 20107, 20108, and 20110 - Tank Turnover Equipment

CWS budgets $90,300 in 2009, $99,300 in 2010, $55,200 in 2011, and $104,300 in 2012 capital additions for four projects to install tank turnover equipment in seven tanks. CWS states that these tanks are having nitrification problems and are experiencing low chloramine residuals due to stagnant water conditions. DRA notes that stagnant water conditions occur more frequently when excess storage exists and there is not enough demand to drain and refill tanks on a regular basis. The WS&FMP concurs with this statement,[62] another reason to not add any more storage than necessary. DRA requested water quality data for the tanks in question to document the rise in nitrate levels and any drop in chlorine residual. CWS provided an email from June 2007 showing low chlorine levels (around 0.07 ppm) in two tanks at Station 118 and somewhat elevated nitrate levels up to 8 mg/L in the "4th Quarter" for one unlabeled year of data.

In the email, CWS staff indicated that they would be pursuing pumping strategies to physically mix the tanks by draining the tanks to less than the halfway mark and filling them back up again. However, no results of the pumping strategies were provided. The nitrate data was only for one year, had no label, and the concentration reached was only 8 mg/L, significantly less than the MCL of 45 mg/L. Without information regarding the effectiveness of using pumping strategies to mix the tanks, DRA cannot support $350,000 in projects that have uncertain benefits to ratepayers. Therefore, DRA recommends disallowing these projects, since CWS failed to demonstrate the current ineffectiveness of the alternative pumping technique.

[62] WS&FMP p.9-29.

7) Pump Replacement Program

CWS budgets $146,000 in 2009, $188,600 in 2010, $866,600 in 2011, and $233,300 in 2012 capital additions for pump replacement and associated projects such as wharf head replacement used for portable booster connections. This budget does not include pressure vessel replacement, new pumps for equipping new wells, replacement panelboards or new generators.

Table 7-E. CWS Proposed Pump Replacement Costs

2009	2010	2011	2012	Total
$146,000	$188,600	$866,600	$223,300	$1,424,300

CWS claims that the pump replacement projects are necessary due to low efficiency pumps and motors, and in some cases to increase flow capacity to meet peak hour demand conditions or fire flow requirements. However, in many cases, DRA discovered that CWS is proposing to replace pumps that are rated 60% or greater in terms of operational plant efficiency (OPE). According to established CPUC pump test standards, only pumps below an OPE of 50% are considered "Low" efficiency. DRA recommends that the following pump replacement projects be disallowed due to recent pump tests not meeting this minimum criterion: 17096, 17097, and 20402 as shown in Table 2 above. DRA recommends disallowing pump replacement projects 20383 and 20394 related to adding energy efficiency monitoring, since DRA recommends a pilot program in Marysville should be implemented instead. DRA also recommends disallowing project 16890, since no cost savings data was provided in the pump test to determine the payback period for replacement.

DRA recommends the following pump replacement projects be disallowed, since they incorrectly cite a standard of meeting fire flow plus max day demand (MDD), which is inaccurate for existing facilities: 20567, 20569, 20572, 20580, and 20581. The WS&FMP performed a hydraulic analysis on the Mid-Peninsula water distribution system, based upon a criterion of meeting MDD while

maintaining 20 psi at all service connections to determine fire flows. This is a flawed assumption, as there is no requirement to meet MDD plus fire flow for an existing water system. Only new portions of a system are required to meet this standard.[63] Existing facilities should meet average day demand plus fire flow, but do not need to be upgraded to meet changes in fire flow since the time of installation.[64]

DRA thus recommends that the Commission approve $20,000 in 2010, $20,100 in 2011, and $20,300 in 2012 capital additions as well as approximately $20,000 per year for non-specific pump projects.

8) Project 20532 – Rebuild Station 103 Pump & Tank

Project 20532 budgets $866,400 to rebuild Station 103 booster pump and tank. There are currently four booster pumps at the existing 165,000 gallon concrete sump which has been out of service since 1997.[65] Booster pumps C, D and E are in service with a total pumping capacity of 4,300 gpm (6.2 MGD). Recent pump tests for boosters D and E showed an OPE between 62% and 72%, but CWS declined to provide pump tests for booster C.[66] Station 103 (located in zone 300) pumps to zone 345 which has an ADD of 0.84 MGD and a MDD of 1.43 MGD. Since the pumping capacity far exceeds the MDD for zone 345, there is no pumping capacity deficit. In the WS&FMP there is a recommendation that booster C should be evaluated for rehabilitation or replacement - not just replaced as CWS has proposed. DRA disagrees with recommendation to replace booster C,

[63] GO 103-A. II. Standards of Service. B. Quantity of Water. 3b) Potable Water System Capacity, p.11.
[64] GO 103-A, VI. Fire Protection Standards, 3.Replacement of Mains A.Changes to Fire Code, p.25.
[65] CWS response to DRA data request MD7-002, Question 7.
[66] Ibid.

as no reason was given for replacement other than age. DRA instead recommends condition monitoring and performance based replacement, which has not been demonstrated by CWS.

In terms of a storage deficit, CWS states in its WS&FMP that 300,000 gallons are needed in zone 300. However, the WS&FMP acknowledges that storage would only be needed in the event of an SFPUC outage. CWS fails to note however, that there are six emergency connections from Redwood City and the Belmont Water District that connect to zone 200 in San Carlos.[67] These connections could be used in the event of a widespread SFPUC outage, and pumped to zone 300,[68] instead of installing emergency storage for these zones. Therefore, DRA recommends disallowing replacement of this concrete sump as it is an unnecessary and unjustified capital project.

9) Project 20403 – Redundant Source of Supply to Zone 290

CWS budgets $313,200 in 2011 capital additions for adding a booster station in zone 145 to provide backup pumping capacity (not a source of supply) to zone 290. The MDD of zone 290 is 1.56 MGD. CWS claims that this would provide enhanced reliability in the case of a SFPUC water connection outage. However, CWS currently has four emergency boosters each with a rated power of 125 HP that are dedicated to the Mid-Peninsula district. These boosters could easily be connected to the field yard in zone 145 and used to pump water to zone 290 in the event of an SFPUC outage. Therefore, this project is unnecessary and DRA recommends that it should be disallowed.

[67] Mid-Peninsula WS&FMP p.5-8 and Figure 5-2c.

[68] Alternatively, the 9 pressure reducing valves (PRV's) between zone 200 and 300 could be adjusted to allow flow from the emergency connections into zone 300.

10) Panelboard & Pressure Vessels Replacements, New Generators, & Permanent Relief Valve

CWS budgets $707,300 in 2010, $487,000 in 2011, and $390,000 in 2012 capital additions for panelboard replacements, new generators, and relief valve bypass projects. According to CWS, the panelboard at Stations 23 is 53 years old and the panelboard at Station 25 is 49 years old, which meet DRA's replacement criteria of 40 years of age or older. Project 20287 for panelboard replacement at Station 6 relates to project 20294 which DRA does not support; therefore this project is unnecessary.

In its general panelboard project justification, CWS claims that it is difficult to obtain replacement parts for panelboards beyond 20 years of age. However, in contradiction to this statement other water utilities such as San Jose Water Company typically replace panelboards after 40 years of service. When DRA asked CWS to document the fact that replacement parts were unavailable, CWS merely replied that the existing space in older panelboards does not allow for easy design upgrades.[69]

CWS' answer was non-responsive to the question at hand, namely, to provide evidence that replacement parts are hard to come by after the boards have reached 20 years of age. CWS instead spoke about the difficulty in performing upgrades, which was not a justification for these projects. The only concrete piece of evidence CWS offered was the fact that GE no longer manufactures the 206 series starter circa 1980, but instead offers the "slightly different" 306 series starter.[70] However, CWS did not claim or provide any evidence that a 306 series starter could not fit in the existing space on a panelboard where a 206 series starter was installed. In the absence of evidence that replacement parts are unavailable or

[69] CWS response to DRA data request MD7-007, Question 3.
[70] Ibid.

incompatible with the existing panelboards, and given other water utilities' policy of extending the panelboard life till at least 40 years of age, DRA recommends disallowing the capital additions associated with projects 20277 and 20275. DRA recommends approving project 20272 and 20274 at an adjusted cost of $155,405 after removing an undocumented price escalation.

CWS proposes replacing pressure vessels at Stations 26, 12, and 23. DRA agrees with CWS on the need to replace pressure vessels at Stations 12 and 23 but not at Station 26 (project 20593). According to the WS&FMP there is no pressure vessel at Station 26. As well, CWS did not provide a project justification for this project even though its total budget is $100,000. Therefore, DRA recommends approving projects 20595 and 20659 for new pressure vessels at Station 12 and 23, and disallowing project 20593 at Station 26.

CWS proposes adding backup power diesel generators at Stations 17, 26, 106, and 116. At Stations 26 and 106, the WS&FMP recommends that CWS employ its portable boosters to provide backup power in the event of an emergency. Therefore, these projects are unnecessary. At Stations 17 and 116, the WS&FMP did not identify these stations as being of critical importance and thus they do not require a dedicated backup power generator.

CWS proposes project 20166 for a relief valve bypass at Station 118 at a cost of $71,300 in 2010. CWS states that pumps at Station 118 fill the tank at Station 119, and when the tank is out of service, a temporary relief valve must be used instead. CWS admitted that this tank has only been out of service once every five years for its regular inspection and that the costs for installing the temporary bypass measure are about $3,000 per occurrence. The additional time for installing the temporary bypass setup and removal takes two days every five years. This is a minuscule cost and amount of time over a five year period, and does not justify a $71,300 capital addition which would have a payback period of at least

118 years. Therefore, DRA recommends disallowing this project and instead suggests that CWS continue to use its current operational practice of installing a temporary relief valve once every five years during the tank's inspection.

11) Project 17937 – Security Mitigation Improvements

CWS budgets $127,824 in 2010 capital additions for security improvements to its San Carlos system. CWS previously requested $191,900 for 2009 security improvements in the last GRC, which were approved as project 17926. CWS provided the project justification for 17926 again in this GRC, which did not state that the project was only for the San Mateo portion of the District. The justification for 17926 did state however, that the $191,900 was for Priority 2 improvements as identified in the Vulnerability Assessment. This implies that the high priority improvements have already been implemented. Furthermore, there was no project justification provided in this GRC for project 17937. Therefore, DRA cannot evaluate project 17937, and recommends that it be disallowed and removed from capital additions for 2010. DRA recommends that $191,900 for project 17926 be included in capital additions for 2009.

12) Project 20536 – Additional 4" PRV - Palomar Drive - Zone 525

CWS budgets $54,800 in 2010 capital additions to install a new PRV at Palomar Drive. CWS states that although the system can currently meet PHD, an additional PRV is necessary to meet fire flow and maximum day demand conditions. DRA disagrees. As stated before, there is no requirement for an existing water system to meet MDD plus fire flow. CWS is mistaken about GO 103-A requirements, which only call for this standard for new portions of a water supply system. Therefore, without further justification, DRA recommends the additional PRV at Palomar Drive be disallowed.

13) Vehicle Replacement, 2009 – 2012

CWS proposes to replace ten vehicles over the 2009-2012 rate case cycle in both South San Francisco and the Mid-Peninsula Districts.[71] DRA examined all the vehicle replacement projects and determined that only two of the ten conform to the current DGS replacement criteria. Project 20213 to replace a 2004 Chevrolet C-1500 X-cab and project 17773 to replace a 2006 Dodge Ram 1500 Quad Cab are recommended by DRA for replacement in 2009 and 2011, respectively. None of the other remaining vehicles will meet the mileage standard of 120,000 miles driven by 2012 for light trucks and sedans, nor the 150,000 miles driven standard for vehicles with a gross vehicle weight rating (GVWR) of over 8,500 lbs or vehicles with a four wheel drive train.

DRA notes that the Commission has previously ruled that the most recent DGS criteria were the appropriate standards for replacement in rate cases involving both CWS and Southern California Water Company.[72] DRA discovered that DGS no longer uses an age based criteria (formerly 8 years) and now relies upon mileage as the sole metric to determine replacement.[73] DGS states that, "The decision whether to retain, reutilize, or dispose of any vehicle not meeting the minimum replacement criteria shall be based on an inspection taking into account the following factors:

- Current mechanical condition.
- Previous maintenance and repair record.
- Extent of needed repairs and availability of parts and life expectancy of vehicle after repair.

[71] MD7-011, Question 1. CWS informed DRA in its response that it had decided to cancel seven vehicle replacement projects.

[72] D.06-01-025 for Southern California Water Company, and D.07-12-055 for CWS.

[73] DGS Fleet Handbook, April 22, 2008. http://www.documents.dgs.ca.gov/ofa/handbook.pdf.

- Current sale value.
- Cost and availability of replacement unit and accessories.
- Owning agency's ability to replace unit.

Since CWS did not submit a report to describe why an exception to the DGS criteria should be made to any of its vehicle replacements in Mid-Peninsula, DRA recommends approving two vehicle projects (20213 and 17773) at a estimated cost of $18,900 and $23,700, respectively, in 2009 and 2011 capital additions.

14) Projects 20057, 20368, 20080, 20369, 20081 – Replace Various Valves and Blow-Offs

CWS budgets approximately $342,000 to replace blow-off valves, and approximately $397,000 to replace various valves in the 2010-2012 time period. DRA requested information on the historical number of valves and blow-offs replaced, historical costs for valve and blow-off replacement, but CWS was unable or unwilling to provide the data.[74] In its project justifications, CWS said that "existing mainline valves are broken due to old age and in some cases acidic soil conditions…It is expected that our crews will break main line valves while they are performing unidirectional flushing and doing main shut downs due to leaks." CWS provided no rationale or evidence to support the estimate of the average number of valves and blow-offs to be replaced annually. CWS also acknowledged that its non-specific capital budgets include provisions for "broken gate valves"[75] among other replacement costs that cannot be reasonably foreseen. Therefore, DRA recommends that CWS use its non-specific capital budget to replace valves and blow-offs, as there is no credible estimate of the number or type of valves requiring replacement and these categories, by CWS own admission, fit into the

[74] CWS response to DRA data request MD7-017, Question 10.
[75] CWS response to DRA data request MD7-007, Question 1.

established purpose of the non-specific capital budget. DRA has removed these capital projects from plant additions during their respective years.

15) Projects 23367 & 21331 – Tank Painting

CWS proposes $275,580 in 2010 capital additions for project 23367 to paint the interior of Tank 2 at Station 27 and $385,000 in 2012 capital additions for project 21331 to paint the interior and exterior of Tank 1 at Station 27. DRA examined the condition of the tanks and agrees that the repainting is necessary and prudent. DRA disagrees on the cost estimates however.

For project 23367, CWS referenced Tank 2 at Station 203 in the Dominguez district with a total interior surface area of 11,700 sq. ft. However, the project requires 16,815 interior square feet, so a better cost per foot reference would be Mid-Peninsula Hillsdale Tank 1, with a total interior surface area of 17,168 sq. ft., completed in 2008. DRA scaled the $175,270 total cost of the Hillsdale tank painting and escalated by 2 years of inflation to arrive at its estimate of $181,966. Therefore, DRA recommends that this project be approved at a revised cost of $181,966 in 2010.

For project 21331, CWS referenced Mid-Peninsula Hillsdale Tank 1, with a total interior surface area of 17,168 sq. ft., completed in 2008. DRA scaled the cost of the Hillsdale tank painting and escalated by 4 years of inflation to arrive at its interior estimate. For the exterior estimate, CWS referenced South San Francisco project at Station 1, with an external area of 7,348 sq. ft. However, the project requires 12,463 sq. ft. of external painting, so a better cost per foot reference would be the Simla Tank in Los Altos, with an external surface area of 12,422 sq. ft., completed in 2008. DRA scaled the $80,065 total cost of the Simla Tank painting and escalated for inflation and added the interior estimate to arrive at its budget of $269,984. Therefore, DRA recommends that this project be approved at a revised cost of $269,984 in 2012.

16) Non-specific Capital Budgets, 2009 to 2012

CWS proposed $955,100, $975,500, $997,900, and $1,019,500, respectively in plant additions for non-specifics in the four years from 2009 to 2012. CWS non-specific estimates are based on a 10-year average with a 2% yearly escalation factor. DRA agrees with using the 10-year average, but has used escalation factors for 2009 through 2012 from the May 2009 Energy Cost of Service Branch escalation factors memo. These factors are: 2009 = (5.5)%; 2010 = (0.1)%; 2011 = 2.0%; 2012 = 2.7%. Using these escalation factors the non-specific estimates are $884,800, $884,000, $901,800, and $926,100 for 2009, 2010, 2011, and 2012 respectively.

D. CONCLUSION

DRA's recommendations have been incorporated in the calculations for DRA's recommended Plant in Service as shown in Table 7-1 and Table 7-2.

TABLE 7-1

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

PLANT IN SERVICE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Plant in Service - BOY	84,499.4	95,997.2	11,497.8	13.6%
Additions				
Gross Additions	2,597.3	9,545.2	6,947.9	267.5%
Capitalized Interest	62.9	230.2	167.3	266.0%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	(155.0)	(155.0)	0.0	0.0%
Net Additions	2,505.2	9,620.4	7,115.2	284.0%
Adjustments				
Gen. Plant allocated to contracts	0.0	0.0	0.0	0.0%
Historic Capitalized Interest	(226.7)	(226.7)	0.0	0.0%
Plant in Service - EOY	87,004.6	105,617.6	18,613.0	21.4%
Weighting Factor	21.2%	21.2%		
Wtd. Avg. Plant in Service	84,803.6	97,809.3	13,005.7	15.3%

TABLE 7-2

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

PLANT IN SERVICE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Plant in Service - BOY	87,004.6	105,617.6	18,613.0	21.4%
Additions				
Gross Additions	3,999.5	18,238.3	14,238.8	356.0%
Capitalized Interest	97.5	442.2	344.7	353.5%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	(175.0)	(175.0)	0.0	0.0%
Net Additions	3,922.0	18,505.5	14583.5	371.8%
Adjustments				
Gen. Plant allocated to contractors	0.0	0.0	0.0	0.0%
Historic Capitalized Interest	(213.9)	(213.9)	0.0	0.0%
Plant in Service - EOY	90,926.6	124,123.1	33,196.5	36.5%
Weighting Factor	21.2%	21.2%		
Wtd. Avg. Plant in Service	87,621.9	109,325.4	21,703.6	24.8%

CHAPTER 8: DEPRECIATION RESERVE AND DEPRECIATION EXPENSE

A. INTRODUCTION

This chapter presents DRA's analyses and recommendation on Depreciation for CWS' Mid-Peninsula District. Tables 8-1 and 8-2 show weighted average accumulated depreciation and amortization for Test Year 2011 and Escalation Year 2012.

B. SUMMARY OF RECOMMENDATIONS

Differences in DRA's and CWS' estimates are the result of different plant additions for the test year and the escalation year. These differences are discussed in Chapter 7, Utility Plant in Service.

C. DISCUSSION

CWS depreciation rates for components listed in the CPUC Uniform System of Accounts for Water Utilities are based on a "Depreciation Study as of December 31, 2006" prepared by AUS Consultants dated June 21, 2007. If the depreciation rates proposed in the study are used, instead of the depreciation rates adopted in D.06-08-011, the overall composite depreciation rate for the Mid-Peninsula District increases by 0.55% (from 2.57% to 3.12%) and 0.57% (from 2.58% to 3.15%) in Test Year 2011 and Escalation Year 2012, respectively.

DRA accepts the depreciation rates for accounts as provided by CWS, but recommends that DRA perform an audit of CWS' submitted Depreciation Study in the next General Rate Case. The Depreciation Study should use a 0% salvage value for small mains (<6" in diameter). This recommendation is consistent with

the procedure that CWS uses to replace these small mains, abandoning the old main in place, when it is replaced.[76]

Based on the annual depreciation rates for accounts as provided in CWS' Depreciation Study the CWS estimates of implicit composite depreciation rates are 3.12% for Test Year 2011 and 3.15% for Escalation Year 2012. The DRA estimates of implicit composite depreciation rates are 3.15% for Test Year 2011 and 3.16% for Escalation Year 2012.[77] Differences between CWS and DRA estimates for composite depreciation rate are due to differences in Plant-in-Service estimates and subsequent differences in Beginning of Year Gross Depreciable Plant, and Depreciation Annual Accrual. Differences in Plant-in-Service estimates are discussed in Chapter 7.

D. CONCLUSION

DRA reviewed and accepts the methodologies outlined in CWS' Depreciation Study. DRA recommends an audit of CWS' Depreciation Study in the next GRC.

DRA recommends that the Commission adopt DRA's adjusted numbers for depreciation.

[76] For examples, as shown in Tab 55 of the 2009 Bakersfield District Project Justifications, the estimated cost of abandonment of 4" main is $0, this is also attached as Tab L in Appendix B to this report.

[77] Composite Depreciation Rates can be found in Workpaper 9-B2.

TABLE 8-1

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

DEPRECIATION RESERVE & EXPENSE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Depreciation Reserve - BOY	31,744.7	31,852.4	107.7	0.3%
Accruals				
Transportation Equipment	28.6	47.0	18.4	64.3%
Contributed Plant	263.4	261.2	(2.2)	-0.8%
Allocated non-reg contracts	0.0	0.0	0.0	0.0%
Other Plant in Service	2,331.6	2,594.4	262.8	11.3%
Total Accruals	2,623.6	2,902.6	279.0	10.6%
Retirements	(176.2)	(176.2)	0.0	0.0%
Depreciation Reserve - EOY	33,928.7	34,317.6	388.9	1.1%
Weighting Factor	50%	50%		
Wtd. Avg. Depr. Reserve	32,836.7	33,085.0	248.3	0.8%

TABLE 8-2

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

DEPRECIATION RESERVE & EXPENSE

ESCALATION YEAR 2012

	Item	DRA	CWS	CWS exceeds DRA Amount	%
		(Thousands of $)			
	Depreciation Reserve - BOY	33,928.7	34,317.6	388.9	1.1%
	Accruals				
	Transportation Equipment	28.4	50.5	22.1	77.8%
	Contributed Plant	272.4	272.8	0.4	0.1%
	Allocated non-reg contracts	0.0	0.0	0.0	0.0%
	Other Plant in Service	2,404.6	2,909.8	505.2	21.0%
	Total Accruals	2,705.4	3,233.1	527.7	19.5%
	Retirements	(192.2)	(192.2)	0.0	0.0%
	Depreciation Reserve - EOY	36,441.9	37,358.5	916.6	2.5%
	Weighting Factor	50%	50%		
1	Wtd. Avg. Depr. Reserve	35,049.1	35,701.7	652.5	1.9%

CHAPTER 9: RATEBASE

A. INTRODUCTION

DRA and CWS' estimates for Rate Base for Test Year 2011 and Escalation Year 2012 are discussed in this Chapter.

B. SUMMARY OF RECOMMENDATIONS

DRA recommends adoption of its estimates for: Plant in Service, Depreciation Reserve, and Rate Base.

C. DISCUSSION

Tables 9-1 & 9-2 show DRA's and CWS' estimates of Rate Base for Test Year 2011 and Escalation Year 2012. The significant differences between the Rate Base developed by DRA and CWS are due to the differences in the estimates for Weighted Average Plant in Service, Depreciation, Working Cash, and General Office Allocation.

D. NET-TO-GROSS MULTIPLIER

The net-to-gross multiplier represents the change in gross revenue required to produce a unit change in net revenue. Both DRA and CWS have calculated three multipliers which reflect: 1) the increase required under 100% equity-financing where State and Federal taxes are incurred; 2) the increase required under 100% debt financing where taxes are not incurred (identical to the increase necessary to offset expenses); and 3) the increase required for additions to ratebase, which incorporates the capital structure and financing costs of the utility.[78]

[78] As adopted in Commission Decision 09-05-019

DRA and CWS use similar methodologies in calculating the net-to-gross multipliers. Calculations are shown in Table 9-3 and results are presented below. DRA's adjustment to the Domestic Production Activities Deduction (*see Chapter 5*) results in slightly higher numbers than those calculated by CWS.

California Water Service Company
Mid-Peninsula
Net to Gross Multiplier

	CWS	DRA
100% Equity	**1.60424**	**1.68952**
100% Debt (expense)	**1.00111**	**1.00111**
Ratebase Additions	**1.32306**	**1.36859**

TABLE 9-1

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

WEIGHTED AVERAGE DEPRECIATED RATE BASE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Wtd. Avg. Plant in Serv.	84,803.6	97,809.3	13,005.7	15.3%
Materials & Supplies	200.3	200.3	0.0	0.0%
Working Cash - Lead-Lag	471.5	820.6	349.1	74.1%
Amt withheld from Employees	(8.1)	(8.1)	0.0	0.0%
Wtd. Avg. Depr. Res.	(32,836.7)	(33,085.0)	(248.3)	0.8%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	2,354.9	2,354.9	0.0	0.0%
Contributions	5,585.9	5,586.7	0.8	0.0%
Reserved Amort. Intangibles	32.9	40.7	7.8	23.7%
Deferred Taxes	6,474.6	6,474.6	0.0	0.0%
Unamortized ITC	181.8	181.8	0.0	0.0%
General Office Alloc	1,762.7	2,621.3	858.6	48.7%
Taxes on - Advances	105.8	105.8	0.0	0.0%
Taxes on - CIAC	389.7	389.7	0.0	0.0%
Average Rate Base	40,258.7	54,215.2	13,956.5	34.7%
Interest Calculation:				
Avg Rate Base	40,258.7	53,202.4	12,943.7	32.2%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0%
Interest Expense	1,272.2	1,681.2	409.0	32.2%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	1,272.2	1,681.2	409.0	32.2%

TABLE 9-2

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

WEIGHTED AVERAGE DEPRECIATED RATE BASE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Wtd. Avg. Plant in Service	87,621.9	109,325.4	21,703.6	24.8%
Material & Supplies	200.3	200.3	0.0	0.0%
Working Cash - Lead-Lag	373.1	1,032.9	659.8	176.8%
Amt withheld from Employees	(8.1)	(8.1)	0.0	0.0%
Wtd. Avg. Depr. Reserve	(35,049.1)	(35,701.7)	(652.5)	1.9%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	2,501.3	2,501.3	0.0	0.0%
Contributions	5,586.6	5,588.3	1.7	0.0%
Reserved Amort. Intangibles	37.9	61.3	23.4	61.7%
Deferred Taxes	6,622.7	6,622.7	0.0	0.0%
Unamortized ITC	171.7	171.7	0.0	0.0%
General Office Alloc	1,534.1	2,543.3	1009.2	65.8%
Taxes on - Advances	90.1	90.1	0.0	0.0%
Taxes on - CIAC	364.9	364.9	0.0	0.0%
Average Rate Base	40,207.0	62,902.0	22,695.0	56.4%
Interest Calculation:				
Avg Rate Base	40,207.0	61,676.9	21,469.9	53.4%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0.0%
Interest Expense	1,270.5	1,949.0	678.4	53.4%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	1,270.5	1,949.0	678.4	53.4%

TABLE 9-3

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

NET-TO-GROSS MULTIPLIER

TEST YEAR 2011
AND ESCALATION YEAR 2012

Item	DRA	CWS
1) Uncollectibles %	0.11094%	0.11094%
2) 1-Uncoll (100%-line 1)	99.88906%	99.88906%
3) Franchise tax rate	0.00000%	0.00000%
4) Local Franchise (line 3*line 2)	0.00000%	0.00000%
5) Business license rate	0.00000%	0.00000%
6) Business license (line 5*line 2)	0.00000%	0.00000%
7) Subtotal (line 1+line 4+line 6)	0.11094%	0.11094%
8) 1-Subtotal (100%-line7)	99.88906%	99.88906%
9) CCFT (line 8 * 8.84%)	8.83019%	8.83019%
10) Domestic Production Activities Deduciton *	0.00000%	8.99002%
11) FIT (line 8 minus line 9 minus line 10 * 35%)	31.87060%	28.72410%
12) Total taxes paid (ln 7+ln 9+ln 10)	40.81174%	37.66523%
13) Net after taxes (1-line 11)	59.18826%	62.33477%

Net-to-Gross Multiplier (1/line 12) = 1.68952 (DRA)
Net-to-Gross Multiplier (1/line 12) = 1.60424 (Utility)

* DRA - Line 8 minus Line 9 multiplied by 9% mulitplied by percentage of Qualified Activities
CWS - only multiplies Line 8 by 9%.

This net-to-gross multiplier is to be used for changes in net revenue attributable to rate of return changes only and not to be used for rate base offsets. The net-to-gross for rate base offsets is much lower because the interest payments for the debt portion of rate base increase is tax deductible.

CHAPTER 10: CUSTOMER SERVICE

A. INTRODUCTION

DRA has reviewed California Water Service Company's ("CWS'") filing, responses to DRA data requests, and data obtained from the Commission's Consumer Affairs Branch regarding customer complaints in the Mid-Peninsula District.

B. SUMMARY OF RECOMMENDATIONS

DRA finds CWS' customer service record satisfactory and the customer service process reasonable.

C. DISCUSSION

1) Customer calls and complaints

The customer service representatives ("CSR") in the district office handle all customer complaint calls. When a customer calls the district office, the CSR logs the date and time of the call along with a description of the complaint into the Customer Service Information system. The majority of customer complaints are resolved the same day they are received. Billing questions make up a large portion of the calls received by the district office. The CSR tries to resolve the billing issue directly. However, if a resolution can not be reached, the Customer Services Manager in each district is empowered to make billing adjustments as needed.

All customer complaints filed with the Commission are sent to the CWS rates department and follow a different procedure than described above. The rates department contacts the district office to inform them of the complaint with the goal of resolving the issue within 7 days. The district office researches the complaint, contacts the customer to inform them of the investigations findings and works to reach a resolution. Then the district office submits its findings and resolution to CWS' rates department for review. CWS' rates department then

contacts the Commission's Division of Water and Audits or Consumer Affairs branch to present the complaint findings. There was only one complaint filed by a customer with the Commission since the last GRC, and it was regarding billing.

2) Water Quality complaints

CWS' records indicate that the number of water quality complaints have been low relative to the number of customers in the Mid-Peninsula District. An effective system is in place to receive and record customer complaints concerning water quality. Customer complaints regarding taste and odor are handled by a CSR who explains to the customer why those types of conditions occur. Other types of complaints, such as low pressure or the presence of sand in the water, require a serviceman to go out to the premises and investigate the complaint. When a service call is required, the CSR notifies the maintenance department. CWS assigns personnel to investigate the problem, notify the customer, and resolve the issue. The majority of these complaints are resolved by inspecting the premises. CWS tracks all water quality complaints in their system and record them on a monthly summary report.

Table 10-A shows water quality customer complaint data for the last three years. There are six categories for the different kinds of water quality complaints. These categories are defined as:

- Air - can be trapped in water causing a milky appearance which goes away when allowed to stand and the air goes to the surface;
- Dirty - can be discolored water or sand in the water from mainline flushing or a main break in the area;
- Noise - can be associated with the water system, such as wells turning on, or the customer's internal plumbing;
- Pressure - can be too high or too low; and

- Taste or odor - can be stronger than usual from chlorine, or a musty odor the customer is not accustomed to.

Table 10-A

Mid Peninsula District Customer Water Quality Complaints			
Type	2006	2007	2008
Air	6	12	30
Dirty water	47	53	47
Noise	7	9	7
Pressure	81	62	64
Sand	0	2	4
Taste/Odor	9	6	15
Total	150	144	167
Number of Customers	35,430	35,445	35,460
Total as % of Customers	0.4%	0.4%	0.5%

In the past three years there have been 147 complaints regarding dirty water in this district. CWS explains that sediment can build up in the distribution mains of a water system, but this condition is usually more prevalent in groundwater systems. When there is an increase flow due to a CWS crew opening a fire hydrant or a main line leak or break, this sediment is lifted from the bottom of the pipe and suspended in the water. This water can enter a home when the water is turned on. CWS investigated all complaints of dirty water and the remedy was to flush the mains through the fire hydrant to clear the problem.

There were 207 pressure complaints over the past three years. CWS investigated all of these complaints. In most of the cases, CWS determined that the customer had plumbing issues. Pressure complaints can also be related to main leaks, or when a repair is done on a main and sections of the distribution system have to be isolated. This district has an above-average number of pressure complaints due to the large number of pressure zones serving the hilly topography. The different elevations within a pressure zone has a large impact on the pressure that a customer experiences.

D. CONCLUSION

DRA recommends the Commission find CWS' customer service to be satisfactory.

CHAPTER 11: RATE DESIGN

A. INTRODUCTION

In this GRC application (09-07-001), CWS requested changes to the non-residential rate design in Special Request #6, and requested changes to the residential rate design in Special Request #11. Thus, the scope of this chapter is limited to recommendations regarding:

1) The Water Revenue Adjustment Mechanism and Modified Cost Balancing Accounts ("WRAM/MCBA"),[79]
2) Impacts of the conservation rate designs to date
3) Impacts on Low Income customer disconnections, and
4) Low income rate assistance surcharges

B. SUMMARY OF RECOMMENDATIONS

1) a. WRAM/MCBA Should Ensure Ratepayers Do Not Bear the Full Burden of the Economic Downturn

DRA recommends that the Commission require CWS to modify the WRAM/MCBA so that it does not disproportionately disadvantage ratepayers compared to shareholders. The WRAM should no longer require ratepayers to pay the full difference between the authorized quantity revenue and actual quantity revenue. The Commission should modify the WRAM/MCBA so that if there are reductions in consumption, ratepayers and shareholders should split this difference equally. This will ensure that ratepayers and shareholders are proportionally affected when conservation rates are implemented.

1) b. WRAM/MCBA sur-credits should be a flat amount applied to the service charge

When there is a combined over-collection in the WRAM/MCBA, the over-collection should be passed on to ratepayers through a flat surcredit on the service

[79] Other than recommendations regarding WRAM/MCBA in DRA's special request chapters.

charge. This change to the surcredit mechanism will ensure that water-conserving customers who use less water do not receive less surcredit than customers who use large quantities of water. This will enhance the conservation price signal.

2) Not Yet Enough Data to Determine Impacts of Conservation Rate Designs

This GRC application from CWS contains six months of consumption data after CWS implemented the rate design and WRAM/MCBA mechanism Trial Programs. Six months of consumption data is not long enough to draw conclusions about the impacts of the conservation rate designs. The Commission should evaluate the impacts of the conservation rate designs in CWS' next GRC.

3) The Commission should require CWS to monitor disconnections by month and communicate payment options to customers

The Commission should require CWS to continue to track the number of residential and LIRA customer disconnections per month. If the number of disconnections has increased, CWS should develop a low-cost customer communication plan to reduce the number of disconnections. In particular, CWS should place messaging in customers' bills and on its website explaining to customers the options that are available to them if they cannot pay their bills.

4) The Commission should authorize CWS to increase the surcharge for the low-income rate assistance program as necessary to continue to provide the benefit to qualifying customers

CWS states that it proposed to increase the surcharge to fund the low-income rate assistance ("LIRA") program.[80] DRA supports an increase in the surcharge to support the forecasted participation levels in the LIRA program.

C. DISCUSSION

1) a. WRAM/MCBA Should Ensure Ratepayers Do Not Bear the Full Burden of the Economic Downturn

When the Commission adopted the WRAM/MCBA decoupling mechanism for CWS, the concept of the mechanism was to ensure a proportional impact on the utility and ratepayers when CWS implemented conservation rates. DRA's settlement with CWS, adopted in D.08-02-036 states:

> "Parties agree that the desired outcome and purpose of using WRAMs and MCBAs is to ensure that the utility and ratepayers are proportionally affected when conservation rates are implemented.
>
> a. In the context of this agreement, a proportional impact means that, if consumption is over or under the forecasted level, the effect on either the utility or ratepayers (as a whole) should reflect that the costs or savings resulting from changes in consumption will be accounted for in a way such that neither the utility or ratepayers are harmed, or benefit, at the expense of the other party."[81]

Since it is too early to evaluate quantitative usage data on the impacts of the conservation rate designs,[82] it is difficult to determine how much sales have

[80] Report on the Results of Operation, July 1, 2009.

[81] Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 10, section X.2. Filed June 15, 2007, adopted in Decision 08-02-036.

[82] At the time CWS filed this GRC, there were only six months of usage data after implementation of the WRAM/MCBA and rate design Trial Programs, and CWS did not provide an analysis of this usage information to determine whether the utility and ratepayers are

(continued on next page)

decreased due to the effects of conservation oriented rates. But it is unreasonable to assume that all recorded decrease in sales was entirely due to conservation oriented rates and conservation programming, as it is certain that some portion of the decrease was due to the economic downturn and other factors. Yet, as a result of the WRAM/MCBA, ratepayers are currently bearing the full cost of the economic downturn. This issue must be addressed immediately. Therefore, until the impacts of conservation efforts can be better quantified, DRA recommends that the Commission modify the WRAM so that if there are reductions in consumption, rather than ratepayers being required to pay the full difference between the authorized quantity revenue and actual quantity revenue, ratepayers and shareholders split this difference equally. This will ensure that ratepayers and shareholders are proportionally affected under the WRAM/MCBA decoupling mechanism, when conservation rates are implemented in accordance with the settlement.[83]

This issue should be examined in the next GRC, when over three years of consumption information will be available after the implementation of the WRAM/MCBAs and conservation rates. However, it is clear at this time that the WRAM/MCBA mechanisms have led to an unintended consequence: the WRAM shields shareholders from all financial consequences of the severe economic downturn, while ratepayers bear the full cost of the economic downturn. This is an unintended consequence of the WRAM/MCBA trial program, not one of the goals of the program.[84]

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proportionally affected when conservation rates were implemented.

[83] Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 10, section X.2. Filed June 15, 2007, adopted in Decision 08-02-036.

[84] The goals of the WRAM/MCBA mechanism trial program were three-fold:

a)"Sever the relationship between sales and revenue to remove any disincentive for the utility to implement conservation rates and conservation programs

(continued on next page)

While there is not currently a method available to apportion reductions in usage to each different cause – such as conservation and changes in economic conditions, it is clear that there are different factors that can affect water usage and each of them contribute to usage reductions. This is contrary to the WRAM/MCBA, which compensates CWS for all of the reductions in consumption, not just usage reductions from conservation. The Commission should modify the WRAM/MCBA mechanism so that it does not disproportionately disadvantage ratepayers compared to shareholders.

Further, the Commission specifically addressed the possible impact of a WRAM/MCBA for California American Water Company during an economic downturn in decision 08-06-002, p. 16, which stated:

> "One disparate impact that could occur in the Pilot Program period would be a severe economic downturn in one or more of the Los Angeles service areas that causes a significant decrease in revenues. This could occur from a high rate of home foreclosures and/or business slowdowns or shutdowns. We find this would clearly be a disparate impact as the WRAM mechanism would shield shareholders from all financial consequences of the economic downturn while requiring ratepayers to bear the full cost. Since Cal-Am will be tracking sales levels by customer class and service area, any disparate impact can be quickly seen and addressed."

CWS tracks sales levels by customer class and service area; and it is possible to calculate and graph changes in consumption in different classes and service areas. However, it is much more complex to determine or even speculate about the reasons for the changes in consumption. Especially because of the

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b)Ensure cost savings resulting from conservation are passed on to ratepayers.

c)Reduce overall water consumption by Cal Water ratepayers." (see the Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 8, section VI.1. Filed June 15, 2007, adopted in Decision 08-02-036).

significant economic downturn in recent years, that happens to coincide with implementation of increasing block rates, makes it difficult to draw conclusions about the reasons for any changing consumption patterns. Also, all CWS' districts under-collected revenue in the WRAM account during July – December 2008, except Bakersfield, King City, and Palos Verdes.[85] This is an indication that sales were lower than forecasted for almost all districts during this timeframe.

The WRAM should no longer require ratepayers to pay the full difference between the authorized quantity revenue and actual quantity revenue. The Commission should modify the WRAM/MCBA so that ratepayers and shareholders split this difference equally. This will ensure that ratepayers and shareholders are proportionally affected when conservation rates are implemented.

1) b. WRAM/MCBA Sur-credits Should Be a Flat Amount Applied to the Service Charge

When there is a combined under-collection in the WRAM/MCBA, this should be recovered from ratepayers through volumetric surcharges, in accordance with Decision 08-02-036. This maintains the conservation price signals of the surcharge because customers who use more water pay a larger portion of the surcharge. However, when there is a combined over-collection in the WRAM/MCBA, this should be passed on to ratepayers through a flat surcredit on the service charge. This change to the surcredit mechanism will ensure that water-conserving customers who use less water do not receive less surcredit than customers who use large quantities of water. Furthermore, this will also enhance the conservation price signal.

This recommendation is important in light of the first six months of WRAM/MCBA and Rate Design Trial Program implementation where the over and under-collections in the net balance of the WRAM/MCBA typically were far

[85] CWS WRAM/MCBA report to the Division of Water and Audits, March 2009

greater than the 2.5%[86] trigger. In fact these balances were 10% or greater in seven districts, and were between 5% and 10% in another seven districts.[87]

2) Not Yet Enough Data to Determine Impacts of Conservation Rate Designs

DRA and CWS reached a settlement agreement on rate design and revenue decoupling on April 23, 2007, and amended the settlement on June 15, 2007. The Commission ultimately adopted the settlement on February 28, 2008 in decision 08-02-036, and CWS had 90 days after the Commission decision adopting the settlement before the Trial Program became effective. CWS implemented the Trial Program, including the WRAM/MCBAs and conservation rate designs, via Advice Letter 1855, which became effective on July 1, 2008. CWS filed this GRC application in July 2009, and included data through December 2008. Thus, this GRC contains six months of consumption data after CWS implemented the WRAM/MCBA mechanisms. Six months of consumption data is not long enough to draw conclusions about the impacts of the conservation rate designs.[88]

3) CWS should track low income disconnections on a monthly basis and provide this information in its annual report to the Commission on the WRAM/MCBA balances

Ordering Paragraph 6 from the Phase 1A Decision 08-02-036 from the conservation OII (I.07-01-022) ("OP6") requires CWS to provide data related to the implementation of the conservation rate design trial programs. Specifically, OP6 states:

> "6. Suburban, Park, and Cal Water shall provide the following information in their next general rate case: monthly or bimonthly (depending upon the billing

[86] The trigger is "2.5% of the district's total recorded revenue requirement for the prior calendar year" (see Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, Section IX 3) d., Filed June 15, 2007, adopted in Decision 08-02-036.

[87] See CWS WRAM/MCBA report to the Division of Water and Audits, March 2009.

[88] See Special Request #11 for further discussion.

cycle) … increase or decrease in disconnecting low-income program participants for nonpayment by district after adoption of conservation rate designs; increase or decrease in low-income program participation by district after adoption of conservation rate designs; increase or decrease in residential disconnections for nonpayment by district after adoption of conservation rate designs…."

In this GRC application, CWS provided some of the information required in this Ordering Paragraph.[89] In particular, CWS provided information on customer disconnections for both residential and LIRA customer groups for the firs six months of Trial Program implementation between July 1, 2008 and December 31, 2008. However, this data incorrectly "double-counted" low income customer disconnections.[90] CWS provided corrected data for July 2008 through July 2009. However, CWS did not yet provide information about customer disconnections prior to July 2008.[91] In order for the Commission to assess the "increase or decrease" in low-income disconnections when CWS implemented the conservation rate design and WRAM/MCBA Trial Programs, pursuant to the above Ordering Paragraph, data on customer disconnections from before and after the implementation of the conservation rate designs must be compared. Since CWS only provided information from after the implementation of conservation

[89] Prepared Testimony of David Morse, p. 28 – 31.

[90] Email from CWS (Tu Rash), on 1/13/2010, states regarding the query Cal Water originally ran for Dave Morse "in effect that query double counted the number of LIRA customers."

[91] DRA requested information on residential and LIRA customer disconnections from July 2007 through July 2009 in LWA-5 on 12/22/09, and CWS provided an initial response on 12/31/09, but it did not correspond to the numbers in David Morse' testimony, so CWS provided a revised response on 1/5/2010, but this still did not correspond to the numbers in David Morse' testimony. CWS provided a further revised response on 1/13/2010, but this only provided data from 2008-2009. At the time DRA had to finalize this testimony, it had not yet received final numbers for residential and LIRA customer disconnections from July 2007 through 2009, although DRA is confident CWS would have provided the information to comply with this ordering paragraph had there been unlimited time.

rate designs, this is not in compliance with OP 6. DRA believes CWS intended to provide the correct information and CWS should provide this information in its rebuttal testimony so that the Commission can consider it in this proceeding.

On a going forward basis, the Commission should require CWS to continue to track the number of residential and LIRA customer disconnections per month and report this information in the annual report that CWS submits to the Commission by March 31 each year regarding WRAM/MCBA balances.[92] If the number of disconnections has increased, CWS should develop and implement a low-cost customer communication plan to reduce the number of disconnections. In particular, CWS should place messaging on customer bills and on CWS' website explaining to customers the options that are available to them if they cannot pay their bills. For example, PG&E has a message on its website that says:

> "We Know Times Are Tough.
> If you or someone you know is having trouble paying your bill, we can help. Please call us today at 1-800-743-5000 so we can discuss program options and payment arrangements that work for you."[93]

Another example is San Diego Gas and Electric Company, which has messaging on its website that provides a rotational link to "Need Extra Help With Your Bill? Learn about available assistance" and "Get extra help with your bill."[94]

4) The Commission should authorize CWS to increase the surcharge for the low-income rate assistance program as necessary to continue the benefit for qualifying customers

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[92] Pursuant to "Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues," section IX 3), Filed June 15, 2007, adopted in Decision 08-02-036.

[93] http://www.pge.com/myhome/ (accessed 1/28/2010).

[94] http://www.sdge.com/index/ (accessed 1/28/2010).

CWS states that it proposed to increase the surcharge to fund the low-income rate assistance ("LIRA") program.[95] The Commission authorized the LIRA program in D.06-11-053, and it provides a 50% discount on the service charge to qualifying households. DRA supports the continuation of the LIRA program as authorized in D.06-11-053. To the extent that an increase in the surcharge is necessary to support the LIRA program at forecasted participation levels, the Commission should authorize the increase in the surcharge. DRA notes that this surcharge is combined with the surcharge for the Rate Support Fund ("RSF") and that CWS' requested increase from $0.009 to $0.015 per ccf[96] also includes the additional funding to support CWS' increases in the RSF subsidies. For this reason, the required increase in the surcharge to support only the LIRA program should be lower than $0.015 per ccf and should be calculated based upon the final revenue requirement in this case as well as the adopted rate of participation in the LIRA program.

D. CONCLUSION

The Commission should adopt the recommendations on rate design and revenue decoupling included in this chapter.

[95] Report on the Results of Operation, July 1, 2009, Chapter 12 "Present and Requested Tariffs" states that customers pay a surcharge of $0.009 per Ccf to fund the program and that CWS proposes to increase the surcharge to $0.015 per Ccf.

[96] Additional Prepared Testimony of Thomas Smegal, Special Request 11, p. 15, lines 21-22.

CHAPTER 12: WATER QUALITY

A. INTRODUCTION

The Rate Case Plan requires water utilities to submit information about water quality in their GRC applications. This Chapter presents DRA's review of water quality submittals by California Water Service Company ("CWS") for the Mid-Peninsula District and CWS' response to DRA's data request.

The California Department of Public Health ("CDPH") is the primary agency responsible for ensuring that the water provided to the public by the District is safe for consumption. DRA reviewed the most recent CDPH inspection report, the District's response to the report, and the CDPH's response to DRA's inquiry on the District's water quality issues and compliance status.

B. SUMMARY OF RECOMMENDATIONS

Based upon the information provided by the company and by the CDPH, CWS' Mid-Peninsula District appears to be in compliance with all applicable water quality standards and requirements. Exceptions if any are noted below.

C. DISCUSSION

The Mid-Peninsula District serves an estimated population of over 120,000. The District purchases treated water from the San Francisco Public Utilities Commission ("SFPUC"). The system has no alternate water supplies.

The District has not exceeded any primary or secondary Maximum Contaminant Levels ("MCLs") since the last general rate review. CWS reports that nitrification in its storage tanks is a concern in this District and is being addressed by management and monitoring of the turnover in the tanks.

The CDPH conducted a water system sanitary inspection of the District in January 2009. The resulting CDPH report, dated February 4, 2009, cites

operations concerns and specified needed system modifications. CWS indicates that the District has satisfied the compliance actions requested in the CDPH report and is in the process of implementing the Cross-Connection Control Program as required.[97] The CDPH, in response to DRA's inquiry, confirms that the District is in compliance with all applicable water standards.[98]

D. CONCLUSION

Based on the information received, it appears that CWS' Mid-Peninsula District is in compliance with all applicable water quality standards and requirements and is addressing issues raised by the CDPH.

[97] CWS' response to DRA's data request PPM-001.

[98] December 3, 2009 email communications from Eric Lacy of CDPH to DRA.

CHAPTER 13: STEP RATE INCREASE

A. FIRST ESCALATION YEAR

On or after November 1, 2011, the Commission shall authorize CWS to file a Tier 1 advice letter, with appropriate supporting workpapers, requesting the step rate increase for 2012 or to file a lesser increase in the event that the rate of return on rate base, adjusted to reflect the rates then in effect and normal ratemaking adjustments for the 12 months ending September 30, 2011, exceeds the lesser of (a) the rate of return found reasonable by the Commission for CWS for the corresponding period in the most recent rate decision or (b) the rate of return found reasonable in this case. This filing should comply with General Order 96-B.

The Commission's Water Division ("Water Division") should review the requested step rates to determine their conformity with this order, and the requested step rates should go into effect upon the Water Division's determination of compliance. The Water Division should inform the Commission if it finds that the proposed rates do not comply with this Decision. The Commission may then modify the increase. The effective date of the revised tariff schedule should be no earlier than January 1, 2012. The revised schedules should apply to service rendered on and after their effective date. Should a rate decrease be in order, the rates should become effective on the filing date.

B. SECOND ESCALATION YEAR

For the second year, the Commission should grant an attrition adjustment for the revenue requirement increases attributable to expense increases due to inflation and rate base increases that are not offset by revenue increases. The revenue changes shall be calculated by multiplying forecasted inflation rate and operational attrition plus financial attrition times adopted rate base in 2012 times the net-to-gross multiplier.

C. ESCALATION YEARS INCREASES

The table below shows the Summaries of Earnings for Escalation Years 2012 and 2013. To obtain the increases in these years, D. 04-06-018 and D. 07-05-062 require water utilities to file an Advice Letter 45 days prior to the start of the year showing all calculations supporting their requested increases.

The revenues shown in Table 13-1 are for illustration purposes and the actual increases would be authorized only after approval of the utility's advice letter.

TABLE 13-1

SUMMARY OF EARNINGS

CALIFORNIA WATER SERVICE COMPANY
MID-PENINSULA DISTRICT

Item	DRA 2011 (Thousands of $)	DRA 2012	% increase	
Operating revenues	30,447.4	31,075.0	2.1% Esc. Factor	
Operation & Maintenance	16,830.3	17,267.9	2.6%	1.026
Administrative & General	1,480.4	1,515.9	2.4%	1.024
G.O. Prorated Expense	3,217.7	3,301.4	2.6%	1.026
Depreciation & Amortization	2,404.6	2,467.1	2.6%	1.026
Taxes other than income	564.7	579.4	2.6%	1.026
State Corp. Franchise Tax	444.2	443.6	-0.1%	
Federal Income Tax	2,054.2	2,052.2	-0.1%	
Total operating expenses	26,996.1	27,627.5	2.3%	
Net operating revenue	3,451.3	3,447.5	-0.1%	
Rate base	40,224.4	40,180.5	-0.1%	
Return on rate base	8.58%	8.58%	0.0%	

APPENDIX A

QUALIFICATIONS AND PREPARED TESTIMONY

QUALIFICATIONS AND PREPARED TESTIMONY
OF
PATRICK E. HOGLUND

Q1. Please state your name and business address.

A1. My name is Patrick E. Hoglund. My business address is 505 Van Ness Avenue, San Francisco, California.

Q2. By whom are you employed and in what capacity?

A2. I am employed by the California Public Utilities Commission – Division of Ratepayer Advocates (DRA) Water Branch - as a Senior Utilities Engineer.

Q3. Please briefly describe your educational background and work experience.

A3. I am a graduate of the University of California, Berkeley, with a Bachelor of Science Degree in Industrial Engineering and Operations Research. I am also a graduate of the University of Rochester, William E. Simon School of Business with a Master of Business Administration Degree with concentrations in Finance and Corporate Accounting. I am a licensed professional Industrial Engineer.

I have been employed by the California Public Utilities Commission since 2005. Currently I work on Class A water General Rate Cases. From July 1999 through August 2004, I was a Senior Rates Analyst at Pacific Gas and Electric Company, where I worked on a variety of revenue requirements issues related to natural gas. From 1990 through 1997, I was employed by the California Public Utilities Commission. During this time I worked on small water utility rate cases, large water utility rates cases, and also worked in the Telecommunications and Energy Branches of the former Commission Advisory and Compliance Division, as well as in DRA.

Q4. What are your responsibilities in this proceeding?

A4. I am the Co-Project Manager for this proceeding with overall responsibility for twelve CWS Districts: Bear Gulch, Chico, Dixon, Livermore, Los Altos, Marysville, Mid-Peninsula, Oroville, Redwood Valley, South San Francisco, Stockton, and Willows. I am also responsible for the Executive Summary, Chapter 1-Overview and Policy, and Chapter 13-Step Rate Increase of the district reports.

Q5. Does this conclude your prepared testimony?

A5. Yes, it does.

QUALIFICATIONS AND PREPARED TESTIMONY
OF
LISA BILIR

Q.1 Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A.1 My name is Lisa Bilir and my business address is 505 Van Ness Avenue, San Francisco, California, 94102. I am a Public Utilities Regulatory Analyst V in the Water Branch of the Division of Ratepayer Advocates.

Q.2 Please summarize your education background and professional experience.

A.2 I received my Bachelor of Science degree in Biological Sciences from Stanford University in 2001 and a Master of Public Policy from The Goldman School of Public Policy at U.C. Berkeley in 2007.

From August 2006 to June 2007 I worked in the Water Branch of DRA as a graduate student intern. I have been a full-time staff member in DRA since October 2007. Since then I completed a settlement with California-American Water's (CAW) Los Angeles district and the City of Duarte on conservation rate design and revenue decoupling issues. I was DRA's project manager for CAW's conservation application for the Monterey District, where I completed settlements with CAW and Monterey Peninsula Water Management District on conservation programs and plans. I also submitted testimony in CAW's Monterey District GRC regarding conservation rate design and revenue decoupling issues and reached a settlement on that issue. In addition, I completed a settlement with San Gabriel Valley Water Company (SGVWC) in May 2008 regarding an interim budget and funding mechanism for conservation programs in its Fontana Water Company Division. I am DRA's project manager for SGVWC's conservation application A.08-09-008 and submitted testimony regarding rate design, revenue decoupling and reporting requirements in that proceeding.

Q.3 What is your responsibility in this proceeding?

A.3 I am responsible for the chapters on Rate Design, and Special Requests 1, 6, 11, 12, 13, 15, and 29 and I am a co-author for the chapters on Revenue and Special Request #28. For the Revenue chapters, I am primarily responsible for the number of customer and revenue calculations; for the Special Request #28, I am responsible for the portion of the chapter other than the Introduction and discussion of an OIR.

Q.4 Does this conclude your prepared direct testimony?

A.4 Yes, it does.

QUALIFICATIONS AND PREPARED TESTIMONY
OF
ZACHARY BURT

Q.1 Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A.1 My name is Zachary Burt and my business address is 505 Van Ness Avenue, San Francisco, CA 94102. I am an intern in the Water Branch of the Division of Ratepayer Advocates.

Q.2 Please summarize your education background and professional experience.

A.2 I received a dual bachelor's degree in Economics and Chemistry from the University of California at Berkeley in 2001. I received a Master's of Science from the Energy and Resources Group at U.C. Berkeley in May, 2009, and am continuing on to pursue a PhD in the same program as of Fall 2009. My program of study focuses on the economics of water, including demand management, conservation pricing and water services treatment and provision. In DRA, I analyzed and made recommendations on Golden State Water Company's conservation rate designs and reached a settlement with Golden State Water Company in that case. I also wrote testimony and testified orally on San Gabriel Valley Water Company's conservation rate design proposals.

Q.3 What is your responsibility in this proceeding?

A.3 I am a co-author of Chapter 2 on Revenues, and am primarily responsible for the sections regarding sales forecasts.

Q.4 Does this conclude your prepared direct testimony?

A.4 Yes, it does.

QUALIFICATIONS AND PREPARED TESTIMONY
OF
PAT MA

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Pat Ma and my business address is 505 Van Ness Avenue, San Francisco, California 94102. I am a Utilities Engineer in the Water Branch of the Division of Ratepayer Advocates (DRA).

Q2. Please summarize your education background and professional experience.

A2. I received a Bachelor of Science Degree in Industrial Engineering with a concentration in Management from San Jose State University in 1986. In December 2008, I rejoined the Commission as a Utilities Engineer in the DRA's Water Branch. My previous professional position was as a Senior Utilities Engineer at the Commission, where I worked from 1986 to 1999 in transportation, telecommunications, energy and water areas. I received my Professional Engineer License in Industrial Engineering in the State of California in 1989 and also worked briefly for the U.S. EPA, Region 9 as an Environmental Engineer in 1989.

Q3. What is your responsibility in this proceeding?

A3. I am a witness for this proceeding and responsible for Chapters 3 - Operations and Maintenance Expenses for California Water Service Company's Bear Gulch, Livermore, Los Altos, Mid Peninsula and South San Francisco districts and Chapter 12 - Water Quality for its twelve northern districts.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

QUALIFICATIONS AND PREPARED TESTIMONY
OF
CLEASON D. WILLIS

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Cleason D. Willis and my business address is 505 Van Ness Avenue, San Francisco, California 94102. I am a Regulator Analyst in the Water Branch of the Division of Ratepayer Advocates (DRA).

Q2. Please summarize your education background and professional experience.

A2. I graduated from the California State University of Hayward with a Bachelor of Science Degree in Business Administration and Finance, and a Masters of Science Degree in Public Administration and Management. After graduation I joined the California Public Utilities Commission. Since that time I have performed economic and reasonableness analysis for various electrical, gas, water, and telecommunications operations. I have written reports and testified regarding the validity of my findings and recommendations concerning my analysis for various utility proceedings.

Q3. What is your responsibility in this proceeding?

A3. I am responsible for Chapter 4 - Administrative and General Expenses for the following California Water Service Company's northern districts: Bear Gulch, Chico, Dixon, Livermore, Los Altos, Marysville, Mid-Peninsula, Oroville, Redwood Valley, South San Francisco, Stockton, and Willows.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

QUALIFICATIONS AND PREPARED TESTIMONY
OF
K. JERRY OH

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is K. Jerry Oh and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Financial Examiner IV in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your education background.

A2. I graduated from the University of California at Los Angeles, with a Bachelor of Arts in Business Economics.

Q3. Briefly describe your professional experience.

A3. I have been employed by the Commission since February 2000. While at the CPUC, I have conducted audits of water and energy utilities, managed contract auditors, and reviewed energy procurement costs. For the past three years, I have worked on different areas of a water utility's GRC.

Q4. What is your responsibility in this proceeding?

A4. I am responsible for review of the Affiliate Transaction of CWS, General Office Cost Allocation, Taxes for the Bear Gulch, Chico, Dixon, Livermore, Los Altos, Marysville, Mid-Peninsula, South San Francisco, Oroville, Redwood Valley - Coast Springs, Redwood Valley - Lucerne, Redwood Valley - Unified, Stockton, and Willows districts, and Special Request 3.

Q5. Does this conclude your prepared direct testimony?

A5. Yes, it does.

QUALIFICATIONS AND PREPARED TESTIMONY
OF
ISAIAH LARSEN

Q1. Please state your name, business address and position with the California Public Utilities Commission (Commission).

A1. My name is Isaiah Larsen. My business address is 505 Van Ness Avenue, San Francisco, California 94102. My job title is Utilities Engineer and I work in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your educational background and work experience.

A2. In December 2007, I completed my M.S. in Environmental Engineering at the University of California, Berkeley. My undergraduate degree is in Materials Science and Engineering from the University of California, Los Angeles.

I have been employed as a student intern at both Lawrence Livermore National Laboratory (LLNL) and Sandia National Laboratories in Livermore, CA. While at LLNL, I designed and fabricated micro-fluidic hydrogen fuel cells for portable power applications.

As a graduate student intern with the Water Branch, my work included a settlement between DRA and Del Oro Water Company on the Regional Intertie Project. I have been a full-time staff member of DRA since July 2008. I have prepared written and oral testimony for the following proceedings: the conservation and rationing programs in Phase 2 of Cal Am's Conservation A.07-12-010, unaccounted for water in Cal Am's Monterey GRC, A.08-01-027, and utility plant in service and conservation for the SJWC GRC, A.09-01-009.

Q3. What is your responsibility in this proceeding?

A3. I am the witness responsible for Utility Plant in Service testimony for Willows, Marysville, Redwood Valley, Dixon, Stockton, Livermore, Bear Gulch, Los Altos, Mid-Peninsula, and South San Francisco. I am responsible for Depreciation, Working Cash and Lead-Lag testimony for these districts. I am also responsible for Special Request 20.

Q4. Does that complete your prepared direct testimony in this proceeding?

A4. Yes.

QUALIFICATIONS AND PREPARED TESTIMONY
OF
RICHARD RAUSCHMEIER

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Richard Rauschmeier and my business address is 505 Van Ness Avenue, San Francisco, California. I am an Auditor in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your educational background.

A2. I graduated from The Johns Hopkins University with a Bachelor's degree in Environmental Science, concentrating in chemistry and water treatment. In 2000, I earned a Masters of Science from Purdue University. In 2008, I completed training and successful examination for certification as both a Water Treatment and Distribution Operator in California under the State's Department of Public Health.

Q3. Briefly describe your professional experience.

A3. For more than 10 years, I have worked as an employee or consultant assisting organizations develop efficient and effective business policies and practices. In December of 2008, I joined the California Public Utilities Commission as an Auditor.

Q4. What is your responsibility in this proceeding?

A4. I am sponsoring the calculation of Net-To-Gross Multipliers of all districts (see Chapter 9), as well as, DRA's testimony in Chapter 5 (Taxes Other Than Income) and Chapter 6 (Income Taxes) for the 12 districts (Antelope Valley, Bakersfield, Dominguez, East Los Angeles, Hermosa-Redondo, Kern River, King City, Palos Verdes, Salinas, Selma, Visalia, and Westlake).

Q5. Does this conclude your prepared direct testimony?

A5. Yes, it does.

QUALIFICATIONS AND PREPARED TESTIMONY
OF
TONI CANOVA

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Toni Canova and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Public Utility Regulatory Analyst in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your education background and professional experience.

A2. I graduated from The Evergreen State College in Olympia, Washington, with a Bachelor of Arts Degree in Environmental Studies. I have been employed by the Commission for over six years. I have testified before the Commission in General Rate Cases involving several Class A water utilities including California Water Service Company and Park Water Company. Previously, I was employed by the State of Washington's Department of Ecology for 10 years.

Q3. What is your responsibility in this proceeding?

A3. I am responsible for testimony in Chapter 10 – Customer Service, and for the Result of Operations tables for the twelve northern districts.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.